THE CITY OF CALGARY

SERVICE IMPROVEMENT

SERVICE IMPROVEMENT

"Making a Good Thing Better"

90-04863/

SERVICE IMPROVEMENT, ITS HISTORY - THEN TO NOW (1982 - 1989)

In 1982 the Economic Restraint Task Force introduced a focus on Productivity Gains and Measurement in the Corporation. Since its inception Service Improvement has complemented the objectives of City Council's Audit Committee with its strong focus on effectiveness and economy.

In the forefront of Service Improvement issues with their work study analysis and productivity enhancement endeavors were the Engineering department's Waterworks and Streets Divisions. In addition, the Parks & Recreation and Mechanical Services departments were well on their way with integrating Service Improvement into their department's culture. The leadership from these three department heads served to steer the Corporate program into a successful major undertaking.

In September 1983 the Board of Commissioners approved the formation of the Service Improvement Steering Committee. Membership at that time consisted of five Department Heads and its mission was "to actively influence the development and implementation of service and productivity improvements in The City of Calgary".

A corporate model for introducing Service Improvement into the departments was developed. Structurally, departmental Service Improvement Coordinators were appointed to assist the department management teams in creating an awareness of Service Improvement in their culture, developing objectives and action plans for implementing Service Improvement, coordinating training, and measuring progress.

Internal and external Service Improvement training was provided for the Departmental Coordinators. Orientation packages and a motivational in house video was developed to assist them in communicating our corporate thrust and economic focus to all employees.

Senior staff were apprised of Service Improvement strategies and policies through the "Managers Hot Line" newsletter. Gradually the emphasis switched to improved communication at all levels and the "Managers Hot Line" became "The Hot Line", an employee newsletter.

As a result of Group Action and Quality Circle endeavors, departments began to realize successes, resulting in greater enthusiasm for the program. Actual savings were being realized and the expectation for recognition was now raised. More importantly, employees were involved and actively assuming ownership in helping the Corporation to achieve it's Service Improvement goals.

The Employee Suggestion Program and Service Improvement were combined in an effort to provide awards to teams who achieved measurable productivity gains. As well The City adopted a Recognition policy which was integrated into existing department budgets to be used to provide non-monetary awards to employees.

In February of 1985 the Mayors Productivity Cup was first presented in Council Chambers. Since then, this has become the most coveted Service Improvement award in the Corporation. Its presentation has been integrated into an annual Awards Banquet which focuses on celebrating our successes and achievements in 13 specified awards categories.

Gradually we became more confident in lauding our achievements through our Service Improvement reports and presentations. We publicly announced our commitment to the taxpayers through our "We're Up On Service" campaign and subsequently emphasized our pride in our employees in our second Service Improvement video which heralded our achievements.

Corporately the focus moved to publicizing our Values and identifying specific Actions. The City of Calgary's five basic Values and Actions were publicized to all staff and supported with Values & Service Improvement Workshops, a Corporate Attitude Survey and Departmental Action Plans.

Integration became the buzz word and the onus was on the departments to ensure that Service Improvement was incorporated into their corporate culture. Department Heads became accountable to their Commissioners for Service Improvement Performance Objectives. Greater emphasis was placed on real versus estimated budget savings. Communication of Service Improvement issues became integrated with Corporate and Department newsletters.

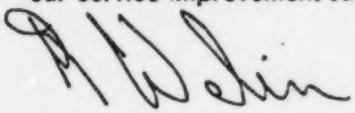
Corporately we declared "War on Paperwork". The emphasis on the effect of technology on achieving productivity gains became a priority to departments.

Economically we switched from "Doing More with the Same" to "Doing More with Less". The impact of Service Improvement on employment was revisited. Service Improvement was publicly identified as being one of a number of avenues for addressing concerns raised in the Financial Planning Task Force.

Integration of Service Improvement now continues through Employee Attitude Surveys, the development of a Municipal Management Development Program SIP Module, and the creation of a "How to Implement and Maintain Service Improvement" manual for Departments.

The real testimony of the success of Service Improvement lies in the fact that it is no longer a program. It has definitely become our way of doing business. With varying degrees of success, 92% of our departments have applied Service Improvement policies and practices to their environment. Our Steering Committee has now grown to include nine Department Heads and one Commissioner, a strong endorsement of senior level management commitment to Service Improvement.

As a progressive Corporation we are proud of our employees and their accomplishments. They have put us on the leading edge of municipalities and will continue to be the driving force behind our Service Improvement success.



R.A. Welin
Chief Commissioner

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ASSESSMENT, TAX AND LICENSE DEPARTMENT

The Assessment, Tax & License Department is responsible for assessing, taxing and licensing all properties and businesses in accordance with Provincial legislation and Council policy. The Department employs 255 employees in four divisions: Administrative Services, Assessment, Financial Services, Tax & License.

ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division is responsible for providing and coordinating effective management and administrative support service to all other divisions of the Assessment, Tax & License Department.

PROJECT: Assessment, Tax & License, Operating and Procedure Manual (A.T.O.M.)

IMPLEMENTATION:

A questionnaire circulated to supervisors in the fall of 1986 identified concerns which formed the basis for the manual content. In March 1987 a task force was established to develop a manual of operating procedures. The manual contains five major sections Administrative, Office, Personnel, Training/Conferences and Resource.

RESULTS:

A.T.O.M. is a reference tool which provides supervisors with readily accessible, consistent information to assist them in communicating procedures to to staff and controlling policies. The manual leads the employee and supervisor step-by-step through their responsibilities. Samples of required forms are provided and required approvals/routings are explained with the appropriate policy (CUPE Contract, Administrative Manual, etc.) being referenced.

PROJECT: Records Centre & Resource Library

IMPLEMENTATION:

In response to a need identified by the department, a consulting firm specializing in records management was contracted to work with designated employees in the development of a central filing and records area. Identification of problem areas and concerns began 1988 September 23 and an action plan was prepared and presented to management.

RESULTS:

The Records Centre & Resource Library provides central use and storage of information and resources. This results in efficient and effective use of vital materials and easy access for all employees. Benefits include: increased service to the public; improved availability of accurate information; improved tracking of records; reduced time spent looking for required records or

recreating new records; and, savings of up to 50% in filing time. Also, a computerized circulation system was designed and implemented to provide enhanced control and audits of the inventory of records.

PROJECT: Consolidating the Assessment, Tax & License Department into One Building

IMPLEMENTATION:

A proposal to combine all offices under one roof was submitted to Commissioners for approval. Once approved the Assessment Division moved to the tenth floor of the Municipal Building, which also houses the Director, Administrative Services Division and Financial Services. Tax & License Division and Customer Service remain on the fifth and third floors.

RESULTS:

In keeping with the "one-stop" philosophy, the move to the Municipal Building provides centralized records and information and therefore improved communications between employees and taxpayers.

ASSESSMENT DIVISION

The Assessment Division is responsible for the fair and equitable valuation of approximately 200,000 properties in the city of Calgary. The division provides prompt and efficient responses to assessment-related inquiries.

PROJECT: Court of Revision (COR) Task Force

IMPLEMENTATION:

A task force was established in July 1988 to investigate and provide recommendations to enhance the proceedings of the COR and interrelated work areas. Utilizing the Group Action Approach to Problem Solving, the task force identified its main focus to be issues dealing with specific policies and procedures.

RESULTS:

Sixteen recommendations were provided to department management. In order to monitor the implementation process, follow-up meetings with departmental management were scheduled. Examples of these recommendations include:

- Procedures for handling recommendations in C.O.R. were redefined.
- A policy was clarified regarding tax implications and refunds on levies that have been paid.
- Court Protocol/Training Programs were established for Property Valuators (P.V's). These programs provided information on rules, proper etiquette, and areas of strengths and weaknesses in presentation style.

- o A policy was prepared and submitted that deals with methods for releasing assessment and tax information to taxpayers or their agents. This will result in consistent information being released and will build credibility with the public.

PROJECT: Reorganization of the Residential Building Assessment Section

IMPLEMENTATION:

In 1987, a task force was formed to address certain problems in the Residential Building Assessment Section. The task force identified three areas of responsibility in the section: General Assessment; Roll Maintenance; and Court of Revision. To better meet these areas of responsibility, Assessment staff were rotated through each area, gaining valuable experience while maintaining a core group to ensure continuous work production.

RESULTS:

The recommendations of the task force provided the Residential Building Section staff with exposure to all areas of residential building assessment, and proved to be a catalyst in increasing effectiveness and efficiency, improving lines of communication and applying policies and procedures in a consistent manner. Other positive results involved the introduction of regularly scheduled and formal meetings between staff, supervisors and the coordinator.

PROJECT: Development of Clerical Control System

IMPLEMENTATION:

Schedules, new plan reports, and statistics were previously generated manually within the Assessment Clerical Section. During 1988, the area developed a simpler method of doing most of these control tasks by utilizing the ever resourceful computer. All control tasks that could possibly be eased by computer application were reviewed and implemented.

RESULTS:

In 1988 alone, this section handled plans involving 3,329 lots, 1,427 new condominium units and 4,064 roll numbers affected by utility rights-of-way. With this high volume of work, the transition of developing computer applications for day to day control has resulted in better work distribution, organization and time savings which also have a positive effect on other divisions within the department. As an example, a report concerning new plans can be sorted and produced one of twenty ways within half an hour whereas before, using the manual method, it took between two and three weeks. Another benefit is an awareness of the importance of service improvement and its effect on daily operations.

TAX & LICENSE DIVISION

The Tax & License Division is responsible for levying and collecting taxation revenues through property taxes, grants in lieu of tax, business taxes, and licensing of mobile homes. The division also

provides a regulating function in issuing of licenses or permits for businesses, miscellaneous activities and or events through by-law enforcement.

PROJECT: Tax Installment Payment Plan

IMPLEMENTATION:

A project team consisting of four Assessment, Tax & License personnel and a management Systems Analyst developed a program to allow for payment of annual property taxes in monthly installments, via automatic withdrawal from the taxpayers' bank accounts.

RESULTS:

The Tax Installment Payment Plan (T.I.P.P.) assists taxpayers in budgeting for their annual property taxes. provides corporate property owners, or individuals owning multiple properties, a more convenient system of paying property taxes that has the added advantage of "built-in" bookkeeping. T.I.P.P. reduces line-ups and delays at tax time, is expected to reduce the number of complaints regarding tax increases, and will provide additional revenue estimated between $28,500 and $340,000 depending on the level of participation and the investment of revenue received. In addition, the T.I.P.P. has had a substantial public relations benefit by demonstrating our willingness to accommodate the taxpayers' budgeting needs.

PROJECT: Major Revision of the Business License By-Law 85/76

IMPLEMENTATION:

On 1988 January 1, the project commenced by assigning two License Inspectors to research license by-laws in other major centres across Canada. The purpose of the research was to reduce the number of license categories in our by-law, which stood at 158, and to eliminate redundant categories.

RESULTS:

Categories of licenses were reduced to 93. With redefining many categories, the new by-law is much easier to understand and more efficient to administer, saving considerable time. Licensing requirements are now easier for the public as well as our licensing staff to understand.

PROJECT: Review and Revise the Local Improvement Project

IMPLEMENTATION:

A Local Improvement Task Force with representation from seven departments, was established on 1988 June 20, to review and revise the entire Local Improvement process. The purpose was to establish better communications with and awareness for taxpayers, City Council and departments.

RESULTS:

Group problem solving was involved in all meetings between task force members, the Provincial Local Authorities Board in Edmonton, and City resource personnel. Changes to administrative policies and procedures and the creation of a 13 page brochure for the taxpayer increased understanding between departments; improved teamwork, communication and service to the taxpayer; enhanced financial controls and reporting capability; and reduced complaints to elected officials.

ADDITIONAL PROJECTS:

PROJECT:

A Supervisory Development Package, identifying supervisory roles and responsibilities, was compiled with the assistance of a supervisors' task force and was distributed throughout the fall of 1988. An evaluation of this package was completed, and feedback was positive. The information in this package will be used as a supplement to the content of a Supervisory Development Program scheduled in 1989.

PROJECT:

The Word Processing Section began collecting statistics on work load. This consisted of line counts by word processing operators and recording calls/desk inquiries by receptionists. These statistics are used to determine work load distribution between divisions and identify peak periods to assist in planning for best utilization of staff.

PROJECT:

Land Property Valuators are now assigned areas and are responsible for everything pertaining to land that happens within their jurisdictions. This has resulted in establishing consistency in dealing with public inquiries, court hearings and establishing land values.

PROJECT:

Research and analysis of land sales on a continuous basis, using an electronic spread sheet (ESS) format, assisted the Residential Land Section in establishing and defending land rates.

PROJECT:

During the Assessment open houses in May and June each year, residential benchmark display boards were designed to assist the taxpayer to visually compare and verify his/her home and classification.

PROJECT:

Computerization of commercial statistical summaries reduced time spent compiling statistics from 37.5 hours/month to four hours/month.

PROJECT:

To get an overall picture of assessment in the city, colour coded classification maps were designed. These maps stated the classification of each house within a particular area and have been useful in analysis, studies and reports.

PROJECT:

Automation of property tax reduction benefits for seniors has reduced turn-around time for applications from 21 days to one day and reduced clerical handling time from 900 hours in 1987 to 525 hours in 1988.

PROJECT:

To improve collection of Business Tax arrears, Business Tax implemented a notice system which has resulted in 55% of arrears being paid within 60 days. This notice system has eliminated the necessity of a Collection Officer spending time contacting the delinquent accounts.

PROJECT:

Through implementation of a weekly credit report to Data Control, Business Tax is able to initiate required refunds within one week of the account being closed. This has resulted in the public receiving their refunds within two weeks as opposed to the previous six weeks. A substantial reduction in telephone inquiries has also been noted.

PROJECT:

Through amalgamation of a covering letter of instruction to the Court of Queens Bench - Sheriff's Office and a Bond of Indemnity into one short form, we have experienced an increase in the level of service, savings in staff time and paper used as well as reduced handling time at the Sheriff's office. This has also resulted in increased productivity of staff at The City as well as the Sheriff's office.

PROJECT:

Development of preprinted court documents for licensing and business tax has resulted in a faster and more efficient processing of documents and reduced staff time in preparing these documents.

PROJECT:

Development of a computerized inventory and billing system for automatic vending operators has resulted in 1,600 records being placed into the computer and a savings of approximately 150 staffhours annually in handling vending operator records.

PROJECT:

To accommodate the 20-fold increase in the number of appeals (5,000+) to the Alberta Assessment Appeal Board, the Information Systems Section designed and built a computerized system for recording and reporting these appeals. This system provided a labour savings of 1.0 to 1.5 clerical staff years of effort.

PROJECT:

To provide computerized data at the 1988 Property Assessment Open House, computer terminals and printers were installed. This was coupled with the development of two computer programs: one to produce duplicate assessment notices and tax bills, and the second to produce assessment details summary. For the first time we were able to print a hardcopy record of the property assessment details for the property taxpayer.

PROJECT:

To overcome delays in processing information changes through the property assessment database following the roll-over of the assessment roll (a mandatory result of closing the database), a new policy was established which reduces this closure period from 12 weeks to six weeks; hence improving the timeliness of the information.

PROJECT:

Comprehensive parcel base section maps of the city were developed for the Assessment Division which detail the street network, parcel addresses, building names and plan/block/lot designations. This reduced the requests for maps developed by the Computer Graphics Section for specialized purposes, representing a reduction of 200-300 staff hours of effort.

CORPORATE RESOURCES

The Corporate Resources Department provides advice, assistance and information to corporate and departmental management in the areas of economics, management consulting, socio-demographic statistics, intergovernmental affairs and strategic management. It also undertakes special projects and policy analysis on matters of corporate importance.

CENTRAL SERVICES DIVISION

This division provides the department with the secretarial support, accounting and budgeting, graphic arts services and all general office services required to keep the department functioning.

PROJECT: Enhancement of Distribution Methods

IMPLEMENTATION:

The purchase of a facsimile machine decreased the time required for receiving and distributing material from the provincial government.

RESULTS:

The change in methods decreased our turn around time for distributing provincial government news releases to the Mayor, Aldermen and other City departments. Porter and courier use is reduced; material is sent electronically to out-of-town contacts, thereby saving some long distance charges and express costs.

PROJECT: Text Production Filing Systems Enhancement

IMPLEMENTATION:

Methods of text production have been standardized, allowing interchange between authors and secretaries for the purpose of editing, formatting and producing final documents. In addition, documents can now be transferred electronically to secretaries for filing.

RESULTS:

The standardized system has eliminated secretaries re-keying text. Documents are more easily edited, formatted and returned to authors in paper form or on a diskette for further editing.

More presentation graphics are being created due to access to printers with a versatile selection of type styles and sizes. This has greatly reduced time the graphic artist has spent on presentation material.

The electronic transfer of documents has made it easy to finalize documents for outgoing mail or for producing hard copy for the central file system.

STATISTICAL SERVICES DIVISION

PROJECT: Postal Code Tape Development and Enhancement

IMPLEMENTATION:

A computer tape has been created which contains postal codes corresponding to mailing addresses in community districts. Working from an original base, new procedures and programs were implemented which addressed problems such as retired postal codes and super mail boxes.

RESULTS:

Because it is unique, the tape allows data retrieval by small areas (community districts) from a variety of external government agencies such as Revenue Canada and the Alberta Bureau of Statistics. Without this tape, such information would not be economically retrievable.

PROJECT: Community District Base Map Reference Manual

IMPLEMENTATION:

A comprehensive reference base set of community district maps was produced by consolidating several map sets and reference tables through use of an inexpensive PC mapping package.

RESULTS:

Yearly updates, a process required as district boundaries change and the city expands are simplified. Potential errors have been reduced as a result of a centralized reference source.

CORPORATE ECONOMICS DIVISION

PROJECT: Economic Information Bulletins/Civic Census Data on PROFS

IMPLEMENTATION:

Key Calgary economic indicators and Civic Census data were made available to PROFS' users. Data such as inflation, interest rates, unemployment and Calgary population statistics are now available on PROFS by accessing the REFERENCE/STATISTICS key on the main menu.

RESULTS:

In the course of a year, over 2,000 queries have been handled through this process, thus freeing up staff for other duties.

DATA PROCESSING SERVICES DEPARTMENT

The Data Processing Services Department (DPSD) provides a unified and responsive information system and services to The Corporation. DPSD assists departments in meeting their corporate objectives by providing leadership and direction in the management, control and security of information services and communications technology. This facilitates the effective use of information technology across The Corporation, increases efficiency, and improves services' delivery.

CLIENT SERVICES DIVISION

The division consults with clients on their information requirements and develops creative and innovative solutions to meet their needs. This includes providing computer feasibility studies, systems development and maintenance, office systems, customer services, and consulting activities.

PROJECT: Request for Proposal (RFP)

IMPLEMENTATION:

The RFP is a standardized legal document, designed by Client Services, to expedite approval of suppliers' bids. The RFP is flexible, as it allows suppliers to propose solutions and alternatives that may exceed client requirements. The RFP has instructions on the document, making it easy to use by both suppliers and City personnel.

RESULTS:

The RFP provides a consistent way of doing business with all suppliers. It streamlines interaction among the Law Department, Purchasing & Stores, and DPSD because of its standard format. In addition, changes to similar or subsequent applications are easier to complete.

COMMUNICATIONS DIVISION

The division develops, maintains and controls the corporate communications network. It assures the speedy and reliable flow of information and data throughout The Corporation by effective management of the computer terminal communications network and the corporate voice system.

PROJECT: Connection of Video Display Terminals by Twisted Pair Cable

IMPLEMENTATION:

In order to connect terminals, the previous standard involved bridging the connection between the main computer room and the data rooms throughout The Corporation with coaxial cable. The project implemented a conversion from coaxial to twisted pair cable. To accomplish the bridging, devices

called baluns are used which are connected by a short cable to the floor cable. By using twisted pair cable, the existing telephone wires can also be used for the installation of terminals.

RESULTS:

Savings were realized in both time and money. The service to users was enhanced through eliminating the time-consuming stringing of coaxial cable to a particular data room. Requests for terminals are able to be met more quickly. Money was saved on an ongoing basis due to the lower cost of twisted pair cable and the reduced resources needed to wire it. This cabling system, which is compatible with current technology, provides the opportunity to use the full range of equipment available in today's market.

PROJECT: Media Network for The City

IMPLEMENTATION:

The media network was implemented to establish an effective communication vehicle between The City and the media. Its inception coincided with the 1988 Winter Olympics and since then has been the main distributor of news releases and public service announcements to the Calgary media.

Due to time constraints, Telecom Canada's electronic messaging service was initially used. Subsequently, the network was converted by Communications staff to an in-house system driven by a personal computer (PC).

RESULTS:

By moving from Telecom Canada's electronic messaging service to a PC based system, it became more user friendly for the City personnel in preparation of news releases. Message delivery became more reliable and controllable, and turnaround time became faster. The operating costs dropped from over $30,000 to less than $15,000 per year in 1988.

DEVELOPMENT SUPPORT DIVISION

This division facilitates the smooth transfer of knowledge within DPSD, and from DPSD to all departments. Services include end user product support, development product support, information processing education, and research.

PROJECT: Training Video Inventory Database

IMPLEMENTATION:

Data Processing provides video training aids to a variety of City departments. Prior to developing an inventory database, records of the training aids were in several formats. In 1988, DPSD developed a database which contains pertinent information on the training aids.

RESULTS:

Information can easily be accessed, updated or extracted for reports. For example, a report can be generated which lists all courses that are to be returned, identifies the borrower and indicates the

monthly charge. The amount of time searching for information has been substantially reduced; the records are readily maintained; and the usage statements are easier to reconcile.

PROJECT: Source Management

IMPLEMENTATION:

The project involved restructuring the source management process which is the storage and maintenance of program source code. The staff reviewed the current process and devised methods to streamline the tasks performed. Implementing particular software resolved changes to application programs moved into production. Further, it provided the occasion to improve several of the processes related to source management.

RESULTS:

This new approach to source management is highly sophisticated, providing a wide variety of services for storing, retrieving and manipulating data. The benefits include increases in auditability, security, scheduling productivity, and programmer productivity.

PROJECT: Micro Computer Equipment Ordering System

IMPLEMENTATION:

The project involved enhancing the existing tracking system and developing an automated ordering system. In order to fill micro computer requests for The Corporation, it is necessary to effectively manage the ordering, receiving, installing, and accounting processes. The modifications to the tracking system ensured all pertinent information was listed and accessible to the users. Previously, manual tasks were automated to include the generation of the orders to vendors and the maintenance of appropriate auditing and accounting trails. Automatic follow-up notifications were also generated to those initiating the requests.

RESULTS:

The micro computer equipment purchases were done more efficiently and more timely with superior control on their justifying, ordering, receiving, installing and tracking. It has freed up staff time to devote to other tasks.

ADDITIONAL PROJECTS:

PROJECT: Inventory of Mainframe Computer Manuals

A survey of usage and an inventory of manuals was conducted resulting in a reduction of the number of manuals required. An annual savings of $24,000 was realized.

PROJECT: Preventive Mtce. Program on Micro Computers and Peripherals

The department was investigating hiring a company to do a mass preventive maintenance program for micro computers at The City; however, by participating in a SAIT student practicum placement program. The City saved $20,625 and had maintenance performed on 150 systems.

INFORMATION RESOURCE MANAGEMENT DIVISION

The division exists to improve awareness throughout The Corporation of the value and importance of effectively managing, sharing and protecting corporate information and data. It also provides direction and coordination in information policy development, records management, geoprocessing (addressing and mapping), and information systems planning.

PROJECT: Parcel Mapping Project Redesign

IMPLEMENTATION:

A series of design and control changes to this project were made and implemented by computer cartographers. These changes included modifying map design files to eliminate duplicate data, improving the accounting and quality control procedures, preparing on-line documentation and input user commands, and modifying standards and output formats.

RESULTS:

The redesign resulted in an increased level of service because both the productivity increased significantly and the quality of the product output was enhanced.

PROJECT: Records Storage & Services Program Improvements

IMPLEMENTATION:

The increasing number of inactive records stored at the Civic Records Centre was growing too quickly for the facility. Expansion of the existing Records Centre or construction of a new, larger one was becoming a likely possibility. Staff undertook several initiatives to address the issue in a more cost effective manner. A change in strategy in the Records Management program was implemented and an educational program was developed and presented to other departments.

RESULTS:

These actions resulted in the annual growth rate of box holdings being reduced to 1/4 the rate of two years earlier. These initiatives have effectively guaranteed that with routine enhancements, the existing facility will continue to serve the needs of The Corporation for many years to come.

Efforts on the part of Records Management and Records Centre staff reduced the amount of material both sent for, and held, in storage.

PROJECT: Unregistered Parcel System and ALIX Data Integration

IMPLEMENTATION:

The project involved developing procedures and facilities to hold and display parcel-related information in one location - a database called ALIX. Previously, tentative parcel information was not available until it had been registered and processed by the Assessment, Tax & License Department. All this activity had to take place prior to any information being added to ALIX.

RESULTS:

The results have provided access to information regarding addresses/legal descriptions allowing interested parties confirmation of this information prior to creating records in their own systems. It has provided The Corporation with a common database that cross-references the information as it becomes available regardless of the stage of registration. It has provided a facility to track both the separation and consolidation of parcels.

ADDITIONAL PROJECTS:

PROJECT: Database and Graphic Quality Control

A series of automated procedures were developed to run quality control checks on the Parcel Project database and graphic design files, resulting in a database accuracy of 99.9% and a graphic element standards accuracy of 99.5%.

PROJECT: Information Storage & Retrieval Quick Reference Booklet

This booklet consolidates and eliminates the need for several help cards, providing quick, simple instructions for accessing on-line publications such as the Corporate Policy Manual, Administration Manual and the Corporate Library System.

OPERATIONS DIVISION

The division ensures that Corporate computer centres, including hardware and system software, are available to meet time sharing, on-line and batch requirements. It also ensures that scheduled production applications, micrographics and reprographics are run correctly, on a timely basis, and that computer output and mail are distributed correctly and on schedule.

PROJECT: Reduction of Set-Up Time on Printing Press

IMPLEMENTATION:

Employees from Reprographics Services (Print Shop) researched and proposed a method of reducing set-up time to prepare the press for changes of ink colours. Previously, print rollers had to be thoroughly cleaned using a special roller cleaning device to ensure that there was no contamination

in the next colour. A second set of rollers was acquired to allow almost continuous production to facilitate ink colour change.

RESULTS:

This allowed increased press production while the other set of rollers were being cleaned, thereby allowing an additional 104 production hours per annum.

PROJECT: Standardization of Input for Civic Records Centre Inventory

IMPLEMENTATION:

The problem encountered was that information from the Records Transmittal Authorization forms was entered into the automated inventory system without any defined standards. This resulted in searches for record retrievals that were incomplete. The dispositions of records could not be fully completed as the searches would not identify all the records approved for disposal.

The staff met to define all the areas that would benefit from standardization and tested the procedures. The fields were identified and the data entry of information was standardized through formal procedure documentation, via administrative orders. This process ensures that each staff member doing data entry enters the information in a similar manner.

RESULTS:

The result of having this standardized input format has been a saving of approximately one staff day per week. This allowed for enhanced productivity and future cost avoidance of additional staff research time.

ADDITIONAL PROJECTS:

PROJECT: Installation of Cash Tape Box

A deposit box between the Cashiers' area in the Municipal Building and the Data Processing Services Department, Operations Division, was installed which eliminated the need for staff to deliver tape between the two facilities.

PROJECT: Origin of Mail Envelopes Identified

A new method to identify the origin of returned brown bill envelopes assists the Mail Room staff in determining where to return mail without having to tear open envelopes.

PROJECT: Reduced Print Shop Ink Inventory

A decrease in the required ink inventory was realized through the purchase of only primary ink colours which allows for in-house mixing of secondary colours.

PROJECT: Avoidance of Canada Post Oversize Charges

The reduction in the dimensions of the medium sized envelopes to conform with Canada Post's maximum standards has resulted in the avoidance of oversize charges.

ELECTRIC SYSTEM

The City of Calgary Electric System exists to provide safe, reliable, economic electric energy and related services to existing and potential energy users within the designated service area, consistent with a financial policy designed to ensure the financial integrity of the utility under the applicable guidelines and regulations.

CONSTRUCTION AND MAINTENANCE DIVISION

The Construction and Maintenance Division is responsible for construction and maintenance of the electrical system. This includes electric substations, transmission lines, overhead and underground distribution service to residential districts and commercial customers, traffic lights, and the streetlighting system. In addition to Manchester complex, the Construction and Maintenance Division is located at the North Service Centre.

PROJECT: Olympic Flag Raising Project

IMPLEMENTATION:

Electric System personnel, I.B.E.W. Local 254, and representatives participated in beautifying Calgary during the 1988 Winter Olympics.

All parties cooperated in the planning, organization and implementation phases of this project. Manpower and equipment had to be coordinated to install the holding brackets in late 1987. The flags were installed in February 1988 and removed after the Olympics.

RESULTS:

Enhanced public perception of the Electric System and its personnel resulted, and morale improved among the employees, as management and field staff worked side-by-side to achieve a common goal. In addition, the project improved management and union cooperation and communication.

PROJECT: Picklists for Material Puchases

IMPLEMENTATION:

Construction and Maintenance, Engineering, General Stores, and D.P.S.D. initiated a method of automated material purchasing within the Electric System Construction Information System (ESCIS).

The information inputted into ESCIS for material was distributed to the crews by Stores personnel, using the IMIS System.

RESULTS:

As crews turn in picklists at night, orders are filled and ready for immediate pick-up in the morning. Time is saved because the crew no longer has to wait for its orders to be filled. Proper descriptions

and stock item numbers on the picklists lead to less hours in the accounting process. With fewer manual writing, mistakes due to poor handwriting have been greatly reduced.

PROJECT: Marking of Service Coils

IMPLEMENTATION:

Developers were concerned with the Electric System's method to mark service coils in new subdivisions. To solve this problem, the wood or steel stakes were replaced with marking tape.

RESULTS:

Developers were satisfied with the marking tape because it was more convenient. Marking tape is a safety improvement for developers, public and employees. In addition, the number of telephone inquiries received by crew foremen were substantially reduced.

ELECTRONIC COMMUNICATIONS DIVISION

Electronic Communications acts as a consultant to other departments and divisions with respect to feasibility analysis, design, procurement, installation, commissioning, operation monitoring, and maintenance of electronic facilities related to the daily operations of civic organizations.

PROJECT: C.C.T.B. Training Programs

IMPLEMENTATION:

The Electronic Communications Division of the Electric System is responsible for the engineering and maintenance of all City of Calgary CCTV distribution systems as well as the entire O.C.O. distribution network, which was inherited by The City of Calgary after the 1988 Olympics. With the tremendous amount of technology and equipment involved in these systems, it was necessary to develop extensive training and preventive maintenance programs in order to better serve the users of these systems. In June 1988, a rigorous and detailed training program was developed in order to educate our technicians in all facets of the various systems. Standards and procedures were developed and implemented as part of an overall plan to maximize the potential of this new technology. Complete preventive maintenance programs and schedules were also developed and carried out as part of the effort to increase productivity and efficiency in all areas.

RESULTS:

As a result of this total initiative, staff have now gained valuable knowledge and experience that will serve them each day as they deal with the complexities of these integral systems. Also, all of the users of these systems will benefit tremendously as productivity and efficiency will dramatically increase as a direct result of the efforts put forward in the training and development of programs to better serve our customers.

PROJECT: Security Card Access Readers

IMPLEMENTATION:

A power outage to the card reader terminal interface board results in a control seizure of both the card reader and the exit button so that the exit doors cannot be unlocked. The card reader terminal interface board was modified to provide a fail-safe system. Another modification also made the external insert card reader "read" as easily as the internal swipe card reader.

RESULTS:

The first modification to the card reader terminal interface board provides safety to the employees and public because they cannot get locked inside the building. The second modification allows insertion into the reader slot at any speed even if stopping during the insertion. The card reading now is dependent on the removal of the card since most people had problems with inserting the card.

UTILITY SERVICES DIVISION

The division provides effective and efficient services and monitors activities within the department. Areas of responsibility are: Personnel, Labour Relations, Productivity Improvement, Safety and Training, Education, Resource Centre, Employee Orientation, Office Services, Inventory, Fleet/Transport, Tooling, Security and Building Plant.

PROJECT: Inter-departmental Locator Workshops

IMPLEMENTATION:

The Electric System and the Engineering Department entered into a joint venture to train fifty Waterworks and Electric System Cable Locators in job planning procedures, communication techniques and technical aspects of giving and receiving effective underground locations.

RESULTS:

The number of high voltage cable damages was reduced from eleven in 1987 to two in 1988. The savings to the utility were $22,000. There was also an improvement in communication between locators and foremen who attended the workshop.

PROJECT: Safety and Team Building

IMPLEMENTATION:

Workshops to study Occupational Health and Safety Regulations, accident control for supervisors and elements that comprise a successful corporate safety and team building program were implemented.

RESULTS:

- attention focused on line management responsibility for safety

- o better awareness of Occupational Health and Safety Act and Regulations
- o enforced the idea that everyone is responsible for his own safety, as well as others
- o 222 Electric System employees attended, consisting of managers, supervisors and foremen

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PROJECT: Card Access System

IMPLEMENTATION:

A Card Access/Security Alarm System was implemented at the Manchester and North Service Centre in May 1988. The objective of the system is to provide controlled after-access to the facilities and a central intrusion alarm monitoring capability.

RESULTS:

The benefits of the system include:

- o historical, computer-generated log of all after-hours access activity to the facilities
- o automatic locking of the facilities after hours, ensuring a secure environment
- o alarm monitoring which instantly indicates when an unauthorized after-hours entry has been attempted
- o provides a controlled and secure environment to risk areas such as computer rooms, operation control centre, payroll, etc

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PROJECT: Rigid Gate Lock Device At Electrical Substations

IMPLEMENTATION:

In 1988, the Utility Services Division began installing the rigid gate lock device designed by I. Levie, a Utility Services employee, at selected Electric System substations. The rigid gate lock replaces the chain and padlock system on the vehicle gates and was also incorporated into the card access system at selected substations.

RESULTS:

The benefits of the rigid gate lock are:

- o provides a rigid locking of the vehicles' gates that does not allow any lateral movement, thus preventing small children from entering the substation yard
- o tolerates shifting of substation gates caused by frost heave
- o provides a locking system that is more resistant to attack than the padlock method of securing the substation vehicle gates

- o the substation gates can be locked from inside the yard, providing a secure environment when workmen are in the substation building
- o designed to operate as an integral part of the Electronic Security System

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ENGINEERING DIVISION

The division plans, designs, coordinates, and inspects construction of the Electrical Distribution System and The City Streetlighting System, to provide safe, economical and reliable electrical service to all customers, and to provide reliable quality roadway lighting for the streets and sidewalks of Calgary.

PROJECT: Conversion to High Pressure Sodium Lights

IMPLEMENTATION

In 1987, the Engineering Division began a five-year program to convert 31,000 mercury vapour streetlights to the more efficient high pressure sodium lights. It is estimated the program will realize a $1.3 million savings (1986 dollars) each year after the program completion.

Originally, the project was to begin in 1986; however, it was unable to start until 1987. All of the 10,425 lights that were to be converted in 1986 and 1987, were converted in 1987. During 1988, a further 7,603 lights were converted, bringing the total to 18,028.

RESULTS

At the end of 1988, the program was ahead of schedule and within budget. Energy cost savings have been calculated at $350,000 in 1987 and $976,000 in 1988. In 1990 we calculate savings will be $1,900,000. We have no doubt that with 13,000 units yet to be converted in 1989 and early 1990, the projected costs savings of $1.3 million per year at program completion will reach $2,000,000. per year. All of these dollar savings have been expressed in 1989 dollars.

EMERGENCY MEDICAL SERVICES DEPARTMENT

The Emergency Medical Services Department provides an optimum level of pre-hospital emergency medical care and transportation for the City of Calgary within the resources approved by Council.

It is staffed by 164 persons, 151 of whom are operational/paramedical.

It responded to approximately 25,231 calls in 1987 and 33,573 calls in 1988.

DIRECTOR'S OFFICE

PROJECT: Renovation of Old Fire Hall #2

IMPLEMENTATION:

This project, which took approximately one year to complete, comprise the total demolition of all interior construction and the rebuilding of the new structure within the building envelope. Additionally the basement area was extended to maximize use and the exterior of the building was beautified. The Emergency Medical Services Department and Engineering's Structures and Building Division worked together, making Old Fire Hall #2 an efficient and pleasant work place.

RESULTS:

The Fire Hall is now a visually pleasing and functional office space and Headquarters for the Emergency Medical Services Department.

OPERATIONS AND SUPPORT SERVICES DIVISION

The division is directly responsible for providing pre-hospital emergency medical care and transporting sick or injured, with the resources provided. Ambulance service is available primarily to the citizens of Calgary, however, responses to the surrounding communities do occur.

PROJECT: Computer Assisted Dispatch

IMPLEMENTATION:

In March 1987. the Emergency Medical Services Department Dispatch Data Collection System was implemented at Rotary Park. The system consists of four major modules: Call Evaluation, Call Dispatch, Billing, and Management Reports.

RESULTS:

The Dispatch Data Collection System is expected to provide an estimated savings of approximately 120 staff days. This allows personnel to be assigned to other more productive tasks. More important than the obvious tangible savings are the improvements provided by the system which includes the administration and control of ambulance dispatching and operational and management reporting.

PROJECT: Mass Casualty Support Unit

IMPLEMENTATION:

A Response Ready Mass Casualty Support Unit for disaster preparedness is now available and housed at Headquarters.

RESULTS:

The Mass Casualty Support Unit (M.C.I. Unit) is built on a one-ton truck chassis, containing stretcher, oxygen and enough basic life support equipment to care for approximately 100 patients. This, along with its own portable lighting system, makes it self-sufficient at the disaster scene. Radios have also been installed in the rear, making this unit a temporary communication centre if required.

PROJECT: Reviewing of Patient Care Reports

IMPLEMENTATION:

The medical auditing of field personnel was started in 1986. Based upon this ongoing process, patient care has continued to improve through 1987.

RESULTS:

The review of field documentation has allowed:

- Closer individual performance appraisals
- Identification of common problems and training needs
- The opportunity for specific, relevant positive feedback

PROJECT: New Replacement Ambulances

IMPLEMENTATION:

Modular style ambulances have been replaced with new high top van ambulances. Throughout 1989, the Task Force - Ambulance Replacement Committee - worked on the challenges involved with this transition.

RESULTS:

The ambulance fleet now consists of 18 high top ambulances and five modular ambulances.

PROJECT: Enhanced 911 Signage

To install signs on the entrance routes to the city of Calgary clearly marking that emergency services (ambulance, police and fire) may be obtained by dialing 9-1-1.

IMPLEMENTATION:

In December 1988, The Emergency Medical Services Department, in conjunction with the sign shop, implemented six 9-1-1 signs, one each to be installed on the entrance roads to the city of Calgary as follows:

Highway 1 - East and West Entrances
Highway 1A - East and West Entrances
Highway 2 - North and South Entrances

RESULTS:

These signs clearly delineate to both the residents of the City of Calgary and visitors in our city the methods of accessing our emergency services. As the 9-1-1 number has not been identified provincially at this time, early access to the system is enhanced through this signage system and through public awareness in this area.

STAFF DEVELOPMENT DIVISION

The division provides current medical education to operations field staff and ensures the highest quality of patient care to the citizens of Calgary through performance monitoring and re-certification programs.

PROJECT: Airport Commanders Course

IMPLEMENTATION:

At the suggestion of a staff member, negotiations began between the Calgary International Airport and Emergency Medical Services to design and coordinate a one-day program of orientation of the structure, layout and procedures of the airport for emergency medical services supervisory personnel.

RESULTS:

Two one-day sessions were held at Calgary International Airport and were very beneficial. The confidence level of the personnel who would be responsible for patient management at an airport incident was markedly increased.

PROJECT: Advanced Life Support (A.L.S.) Course

IMPLEMENTATION:

The Advanced Life Support Course was implemented for the first time in 1987. Emergency Medical Technician - Paramedics were examined in Advanced Cardiac Life Support and Advanced Life Support theory and skills.

RESULTS:

Four separate two-day courses resulted in 58 successful participants. The remainder EMT-P's will be examined in the fall of 1988.

PROJECT: Competency Analysis Profile Training System

IMPLEMENTATION:

Phase one of the Competency Analysis Profile Training System has been completed. This phase began with developing a job profile, developing job performance standards and validation of these standards. Training/ learning needs for each operations employee were determined in diagnostic skills proficiency assessment sessions.

RESULTS:

All employees participating in the diagnostic assessment sessions are aware of their strengths and the areas of performance requiring further training or review. Data from all employees has been collated and analyzed. Training needs for 1988 have been identified.

PROJECT: Street Sense Patient Assessment

IMPLEMENTATION:

The Street Sense/Patient Assessment Workshop was designed by the Staff Development and Technical Services Division and offered to all Emergency Medical Services Operations personnel in 1987 February as a one-day workshop.

RESULTS:

A logical, thorough, step by step method of patient evaluation was discussed and practised during the Patient Assessment portion of the day. The other half of the workshop dealt mainly with scene assessment, safety, problem solving, and managing stress and distress.

PROJECT: Revision of Paramedic Care Review Procedures

IMPLEMENTATION:

1988 November.

RESULTS:

The results have been a more organized and complete methodology for the review of 26,000 paramedic care report forms yearly. The new procedures also allow for performance tracking of paramedics for educational and risk analysis.

PROJECT: Performance Appraisal Form Design

IMPLEMENTATION:

An instrument was designed for the Operations Division to allow annual standardized feedback to the department staff regarding performance in the areas of operational, clinical, interpersonal and communication abilities.

RESULTS:

Facilitated discussion of common goals of patient care, strength and weakness. Employee educational opportunities were identified.

PROJECT: Staff Development Advisory Committee

IMPLEMENTATION:

The Staff Development Advisory Committee was established to advise the Staff Development Division on matters related to training and quality assurance programming which are to be implemented by the Emergency Medical Services Department.

The project started in 1988 November with representation from frontline staff, Operations Division supervisory staff and Emergency Paramedics Association of Calgary Executive members. The committee meets on a monthly basis.

RESULTS:

The committee has been instrumental in the design and implementation of the department's Quality Assurance Program. The committee also assisted in the validation of course content prior to programs being presented to department staff. Several suggestions elicited from this group have resulted in more effective use of current resources and budget funds.

PROJECT: Course Development Policy

IMPLEMENTATION:

This policy was introduced to ensure all training courses were designed to meet the demonstrated needs of operational staff through the medical officer, the medical examiner, and operations staff and to ensure they were based on sound adult education principles. Implementation of this policy occurred on 1988 August 08.

RESULTS:

To date, this policy has allowed for a more structured and effective approach to in-house staff training. It will also allow for capturing of lecture material on a reproducible medium so it may be accessed easily for review purposes.

ADDITIONAL PROJECTS:

1987 Employee Suggestion Awards were received for:

- Dangerous Goods Book
- Maps of District 44
- Velcro Strap Holder
- Sand Bags
- Replacement of Cervical Collars
- Aids Protection
- Medical Protocol Revisions
- Ventolin Medication

1988 Employee Suggestion Awards were received for:

- Ambulance Height Stickers
- Handles for 747 Kit
- Two Batteries for Portable Radios
- Station Supply List
- Modification to Ambulance Doors
- Penlon Bag Resuscitator
- Two Coat Hooks for Ambulances
- Hazardous Material Plastic Ziplock Bags

ENGINEERING DEPARTMENT

The Engineering Department provides a full range of public works services required and requested by the citizens of Calgary.

Services include the collection and disposal of refuse from residential and commercial establishments; construction and maintenance of public roads, lanes and sidewalks; construction, maintenance and operation of the water treatment and distribution systems and the sanitary sewage collection and treatment systems; construction and maintenance of the storm drainage control system; animal control; enforcement of City by-laws under the jurisdiction of the department; the construction and maintenance of municipal buildings; the negotiation and administration of private development agreements relating to subdivision and commercial construction and other forms of development.

ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division enforces Engineering Department by-laws, manages animal control services and department-wide training and productivity programs. This division also represents the Engineering Department in industrial relations activities, acts as a coordinator between the various divisions within the department, and coordinates the department's safety program to promote improved work methods and safety conditions.

PROJECT: Interactive Messaging System

IMPLEMENTATION:

Due to the wide variety of services provided by Animal Control and the numbers of dogs registered, the department had to examine how best to handle the sheer volume of calls which were channelled through a manned switchboard.

An Interactive Messaging System was designed to field a majority of Animal Control inquiries.

By dialing a central number, citizens can access information through telephone punch tones or voice activation on a rotary dial phone.

The first month logged 14,000 phone calls, an estimate of 168,000 per year.

The cost of installing the system was under $14,000.

RESULTS:

With each call averaging two minutes in length, an estimated three staff years have been saved.

In addition, the increased volume of inquiries would have necessitated two additional people to respond to calls. This would have cost The City approximately $42,000 in salary:

2 Employees' salaries @ $21,000 =$ 42,000
Less Interactive Messaging System- 14,000

Savings First Year $ 28,000

The system can respond to many users simultaneously; there is no waiting.

PROJECT: Answering Machine

IMPLEMENTATION:

Previously, Animal Control complaints were received by a switchboard operator and passed on to Animal Control officers who are usually in the field. Gathering the information and passing it on was time consuming and the turn-around time of addressing the complaint was lengthy.

Now, each Animal Control Officer has his/her own answering machine, allowing direct communication with the citizen. An additional feature of the machine allows an officer to talk "live" to the citizen, while in the field. Each of the 14 officers receives an average of five complaints per day.

The cost to purchase each machine is $129.00; no maintenance costs are involved.

RESULTS:

Complaints are now resolved a full day earlier than before. The switchboard operator is freed from answering and channelling approximately 70 calls per day.

The new system allows more direct communication between the officer and the complainant.

PROJECT: Cellular Phones - Pilot Project

IMPLEMENTATION:

Prior to this pilot project, direct communication between complainants and field officers was time consuming. The complainant would phone the switchboard operator, and the operator would fill out a complaint form and pass it on to the officer responsible.

Resolving the complaint often involves direct communication between the field officer and the person against whom the complaint was filed. This would sometimes take days, as the officers usually are in the field, making it difficult to respond to messages.

Two portable cellular phones were leased on a trial basis for six months. The phone enables the officer to make direct communication with the parties involved in the complaint.

RESULTS:

The phones have enabled a faster complaint resolution, as well as broader communication access for the field officers.

ENGINEERING SERVICES DIVISION

The Engineering Services Division provides divisions with cost effective technical/professional support services and information necessary for planning, constructing and maintaining public facilities that are under the responsibility of the City Engineer.

The primary functions of the division are to provide: survey, drafting and computer services to the divisions to maintain and disburse information from the corporate central plant records system and to coordinate placement of utilities within public rights-of-way for City departments and outside agencies.

PROJECT: Central Monument File Maintenance

IMPLEMENTATION:

Monument symbols and names were placed separately in the 1,344 cadastral map files and were updated as map corrections came from the province or from the Legal Survey Section. This procedure was time consuming and error prone. Because of the volume of revisions, operator had to make a change for each revision. The time lapse for monument updates was in excess of four weeks. This caused problems for map users wanting reliable, up-to-date information.

A new method was needed to improve the system. An automatic graphics file update program and the use of single file referencing technique were designed. On a weekly basis, the computer program generates a new graphics file containing all the monuments for the city. Any revised data is picked up as the new file is generated.

The symbols and names are now placed in a single file. Each map sheet references the single monument file so that any updates to the monument file will be reflected on any map that is viewed or plotted.

RESULTS:

Tangible benefits:

- Time saved in checking maps for correct monument information:
  400 maps/yr. x 0.25 hr map = 100 staff/hr = 13 staff days/yr
- Time saved in updating graphics files manually:
  1,200 monument updates/yr x 5 min/update = 100 staff hr/yr = 13 staff day/yr
- Time saved in the error report and correction process is estimated to be about 20 staff days/year.

Intangible benefits:

- More accurate and up-to-date monument information is available and is vital to all facets of the engineering discipline.
- Monument updates can be made without delay.

PROJECT: Engineering Surveys Control Station Recording Sheets

IMPLEMENTATION:

Survey crews are continually setting additional control stations to assist them in laying out their projects. The information pertaining to the control station is written in their field notes which are filed when the job is completed. Generally, other survey crews are not made aware of this information.

A control station recording sheet was developed to record the necessary information pertaining to the control station. This sheet is then turned into the Survey Computer Section who input the information into the REF file. The information is then available to all survey crews.

RESULTS:

Job efficiency is increased by not having to duplicate the setting of a control station that has already been placed. This saves time and adds to the accuracy of the job being done.

PROJECT: Perpendicular Offset Program

IMPLEMENTATION:

To do a cross section using the Geodat (Electronic Field Book) Cross Section Program, the surveyor first has to mark out a base line. The information required is then systematically recorded going perpendicular left and right to the base line. This procedure works well in open areas with limited detail.

In areas that are complex and obstructed, it is more efficient to use the Geodat Radial Program. This method allows the information to be recorded at random. The information however, cannot be processed into cross section format.

To use the efficiency of the radial program and achieve cross section format, a perpendicular offset program was developed.

RESULTS:

Surveys requiring cross section formatting can be done more quickly and efficiently.

An estimated 20% - 30% savings in time can be achieved in the field by this method.

FINANCE & ACCOUNTING DIVISION

This division provides services for developing, implementing and interpreting financial policies; the development of annual and long range operating and capital budgets; the preparation of periodic status reports and the analysis of variances including recommendations for corrective action. The division also provides services for the development and continual review of internal controls; the annual review of utility rates, fees for services, and overhead rates. This area also administers the day-to-day accounting functions such as payroll, preparing financial statements, statistical reports and other financial analysis and reports as required.

PROJECT: Development of Departmental Personal Expense System

IMPLEMENTATION:

Previously no system existed to allow management to monitor actual, as well as committed costs by employees for the various personal expense categories (e.g., courses and seminars, conferences and conventions, general business travel, memberships and hosting).

A computer program was developed to compare budget allocation to committed costs for all types of personal expenses. The database is updated by General Engineering as the data is received and processed.

RESULTS:

Two reports (one showing details by employee and one showing summary by centre within division) are generated each accounting period and distributed to the managers and assistant controllers of each division. Summary reports for each division are also sent to the City Engineer for review. Specific inquiries can also be answered promptly on this Real-Time System.

PROJECT: Online Timesheet Input System (O.T.I.S.)

IMPLEMENTATION:

Before O.T.I.S., employees' timesheets were checked, batched and forwarded to D.P.S.D. for key entry. Annual employee record cards and wages control sheets were kept manually.

Engineering Finance & Accounting initiated a project in 1986 called E.D.E.C.S. (Engineering Data Entry Control System) for entering, monitoring and reporting of Engineering related AMRS, payroll, vehicle and equipment information. However, the I.S.S.C. (Information Systems Steering Committee) approved a proposal for the payroll-related project named O.T.I.S. (Online Timesheet Input System).

The O.T.I.S. System, developed by D.P.S.D. and the Payroll and Benefits Section with input from the Engineering Department, allows individual operating areas to enter payroll timesheet data through local terminals, have this data verified by the system against existing corporate master files and have the system produce control reports for individual operating areas.

In May of 1988, the system was tested and introduced in the Sewer Division. The system was tested and introduced in other divisions of the Engineering Department and other City departments during 1989.

RESULTS:

The system is still at its early stages, 'live' only in the Sewer Division and the Electric System. When fully operational, all City departments will have the ability to key payroll information at the operating areas, replacing the present manual system.

Payroll related data entry costs to D.P.S.D. are reduced as the timesheets are entered at operating areas. Operating Departments experience modest cost increases.

Information is accurate and timely; data entered on a particular day should be reflected on AMRS within 24 hours.

There are fewer keying errors resulting in a savings in error corrections time and fewer wage orders and pay adjustments mean saving processing time.

SANITATION DIVISION

The Sanitation Division is responsible for efficient and effective waste collection and disposal. Waste is collected on a scheduled basis from all residential properties within the city. Commercial properties have the option of using City or private services on a fee-for-services basis. The division is also responsible for the disposal of this waste in a safe and efficient manner. Disposal of waste is controlled at three sanitary and one dry disposal site.

PROJECT: "Clydesdale" Residential Collection Vehicle

IMPLEMENTATION:

The Sanitation Division operates both one-man and multi-men residential collection vehicles. The one-man "Shu-Pak" was highly productive but was costly to purchase and maintain. In addition, its highly productive loading features sometimes resulted in loading in excess of legal ratings.

The division, in conjunction with Mechanical Services, approached a truck manufacturer and examined a vehicle proposed for development, named Clydesdale. Two Clydesdales were leased on a trial basis. Sanitation developed a list of requirements and improvements which were incorporated into the design.

RESULTS:

A list of 21 revisions was developed.

In 1988, a tender was let to purchase new vehicles of this class for Sanitation. The "Clydesdale" had comparable performance characteristics and eventually won the tender award. Each unit was purchased for approximately $12,000 less than the next closest bid in its class. This allowed the division to replace three more vehicles than would normally have been possible. A prototype improved version, incorporating virtually all of the division's suggestions, has now been reviewed and the final result looks extremely encouraging.

SEWER DIVISION

The Sewer Division is responsible for the construction and operation of the sanitary collection and treatment system, as well as the storm sewer trunks and collector systems. The Sewer Division is also involved with river control programs for the Bow River, the Elbow River and the Nose Creek and Fish Creek waterways.

PROJECT: Construction Crew Study

IMPLEMENTATION:

The purpose of this study was to evaluate the utilization of the manpower and equipment in the Construction Section, Sewer Division. The study determined the following areas to be in need of improvements:

- utilization of manpower/equipment
- information flow
- work generation

In order to make the improvements possible, the following recommendations were made:

- a Construction/Repair Coordinator position was created;
- work generation procedures were analyzed and a more effective system developed;
- equipment was relinquished and hired on a job-to-job basis;
- job breakdowns were standardized so that each crew was assigned work it was able to carry out, ensuring optimum administrative coverage

RESULTS:

The study group expects that, with a more streamlined operation and better planning, the Construction Section will turn out higher quality work. At the same time, this section will be able to save $133,000 per year (based on a full year's work) from the release of equipment. The cost savings for 1988 are difficult to quantify since the change-over happened during the year. For 1989, the Sewer Division implemented a cost tracking system to identify the real cost savings in 1989.

PROJECT: Maintenance Management Manual

IMPLEMENTATION:

As the size of The City of Calgary's wastewater treatment facilities increased, it became evident that an effective maintenance organization and clearly established procedures were required. In 1982, a consulting firm developed a system which was implemented using a planned maintenance approach.

This system was computerized in 1986, using the ABC/MM maintenance management system software. A Service Improvement Task Force reviewed the previously established procedures to streamline and update them to the present plant's needs. This manual sets out the procedures recommended by the Task Force.

RESULTS:

The procedures described in the manual serve as a guide to individuals involved in, or using, the maintenance services provided by the Wastewater Treatment Plants. Adherence to these procedures ensures an effective level of maintenance is provided at an economical cost.

PROJECT: Lift Station Operations Manual

IMPLEMENTATION:

The Lift Station Operations manual is a result of a Service Improvement study into maintenance effectiveness. Included in the manual are: guidelines to be followed in the event of an emergency (i.e., overland or internal flooding), a general overview, safety procedures, general procedures, specific operation procedures and equipment inventory lists.

RESULTS:

This manual ensures all the recommendations of the study are implemented, followed and monitored. It ensures the optimum utilization of manpower and provides guidelines for employee safety.

STREETS DIVISION

The Streets Division provides paved and gravel surfaces for vehicular and pedestrian traffic within public rights-of-way.

The division is comprised of six major sections: Accounting, Design, Paving & Sidewalks, Special Projects, Streets Maintenance and Streets Material Plant. The division designs, constructs, and maintains the sidewalks, roads and lane networks. Road plans and construction undertaken by developers are checked and inspected for conformity to approved City standards. The Streets Material Plant manufactures and supplies road construction materials to City forces and other departments as required.

PROJECT: Alternate Utilization of Vehicles and Equipment

IMPLEMENTATION:

The Material Plant Section needed to relocate crushed aggregate from the Sarcee Centre to East Forest Lawn Centre. Street Maintenance identified times during winter when its equipment was available, when sanding, salting, or plowing of roadways was not required. The two sections alternated use of the operators and vehicles, as conversion from sanding units to material hauling was an easy process. The division tracked the effectiveness of the project.

RESULTS:

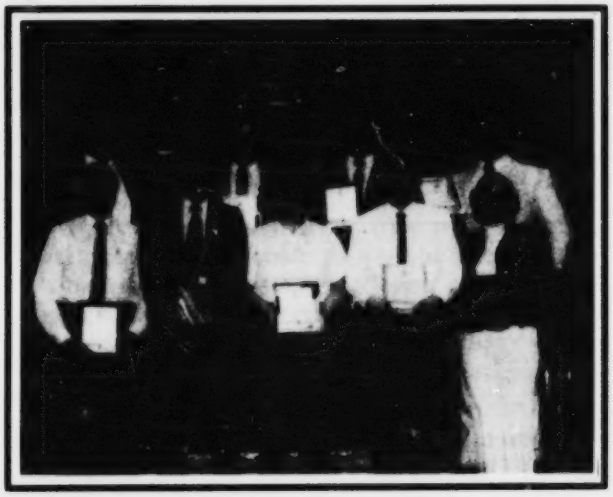
The Streets Division moved the 8,500 tonnes of material at a cost of 26 cents per tonne, resulting in a $42,500 savings compared to any other means of hauling.

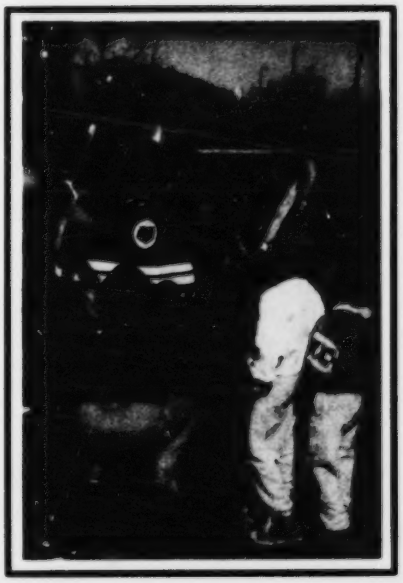
PROJECT: Level Coursing Prior to Surface Overlay

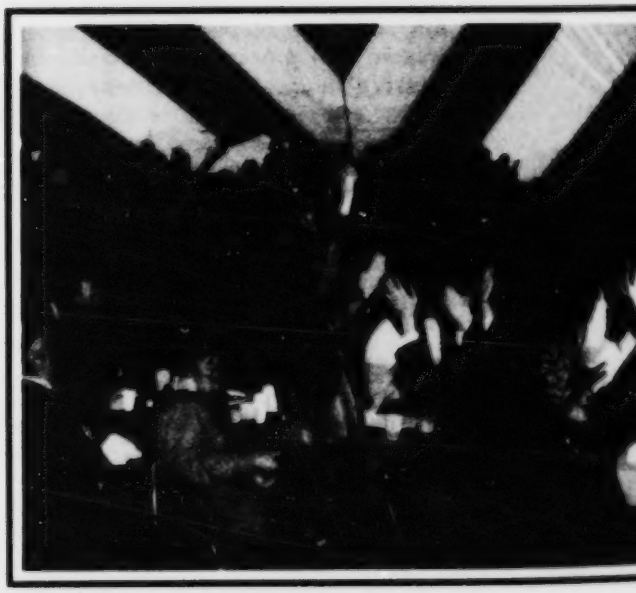
IMPLEMENTATION:

The method of placing level course asphalt was changed. Initially the job was performed using a full crew complete with paver. The new method uses a grader and smaller crew. The quality of product

Recognizing







Excellence

has improved; the rate of placement level course has increased and paver crews are available to place surface overlay elsewhere.

RESULTS:

Unit cost for surface overlay asphalt has decreased from 1987 by 95 cents per square meter. 602,322 square meters of roads were treated in 1988, leading to total cost savings of $522.205.90 in one year alone. This is not a one-time capital saving, but is an operating program. These annual savings of over half a million dollars are expected to continue each year.

PROJECT: Improve Concrete & Asphalt Repair Quality of Measurement

IMPLEMENTATION:

Concrete and asphalt repair quality was measured in the 1986 and 1987 summer seasons, although 1987 was the first full season of measurement. Before starting the 1988 season, personnel were notified that concrete and asphalt work would be measured and compared to the 1987 base line.

RESULTS:

The following table contains percentages of repairs meeting established standards:

	1987	1988
Maintenance - Asphalt Repair	59.6%	72.3%
Maintenance - Concrete Repair	54.9%	90.9%
Permit - Asphalt Repair	37.4%	76.4%
Permit - Concrete Repair	59.5%	92.1%

Improved quality of repairs resulted in more efficient operation.

URBAN DEVELOPMENT

The Urban Development Division acts as coordinator for the Engineering Department in planning and development matters. This control and facilitation extends to any development undertaken, subject to the conditions of a development permit or as a result of a subdivision which is controlled through the terms of a legal Development Agreement.

PROJECT: Overland Storm Drainage Easements

IMPLEMENTATION:

Concrete drainage gutters are installed at the rear of laneless lots. No access provisions were retained by The City and no obligations for maintenance of these gutters by the homeowners were established. Public overland storm drainage easements are now requested on all affected titles concurrent with the registration of subdivision plans. The easement document outlines The City's right to access and the homeowner's obligation to maintain.

RESULTS:

Clarification of obligations and rights of both The City and homeowner was established. The public is better educated to its obligations. The level of service provided to both the homeowner and The City has been increased without an increase in net costs.

PROJECT: Lawyers' Inquiries - Status Reports

IMPLEMENTATION:

The division receives numerous inquiries from lawyers as to whether there are any outstanding engineering costs or charges against specific properties. The nature of these inquiries necessitated considerable research to respond. The role of the division in responding to these inquiries was formulated. A form letter was established after consultation with the Law Department and all other divisions of the Engineering Department.

RESULTS:

This form letter response provides a much quicker response time to these inquiries. The level of service has increased and less staff hours are spent in researching the responses.

PROJECT: Land Dedication Agreement Ledger

IMPLEMENTATION:

The monitoring of the Land Dedication Agreements was previously done using a card index system. To prepare for the transition to monitoring by computerization, a ledger system was designed and implemented for the monitoring of these agreements.

RESULTS:

Information is retrieved faster and the system is more efficient.

WATERWORKS DIVISION

The Waterworks Division provides the design, construction, and maintenance of The City water system as a public utility. This division supplies and distributes potable water to residential, industrial and commercial users; supplies and distributes water for fire protection through a sub-system of fire hydrants and, subject to Council approval, to consumers outside the city boundaries.

PROJECT: Power Factor Correction

IMPLEMENTATION:

The power requirements of Waterworks facilities typically consist of a large motor load with an insignificant lighting and instrumentation load. Because of this load mix, Waterworks chose to accomplish power factor correction by installing capacitors on all motors 50 H.P. and larger. This resulted in the installation of 5601 kVA of capacitance on a total of 76 motors with a total reduction of 780 kVA.

RESULTS:

Calculations based on power consumption indicate a power savings in the order of 5% for secondary stations. In 1987, the total power bill for secondary stations was $814,000.

Unlike the secondary stations, the billing rate at the Bearspaw complex is based on a direct demand charge of $8.07 per kVA per month plus charges for the kWh consumption per month. The demand charge reduction at Bearspaw due to power factor correction is 144 kVA.

Calculated savings for secondary pump stations and the Bearspaw complex is as follows:

Bearspaw	144 kVA x $8.07 x 12 mths.	=	$13,900
Secondary Stations	$814,000 x 5%	=	$40,700
Total Calculated Annual Reduction		=	$54,600

PROJECT: Main Replacement Cost Control and Inventory System

IMPLEMENTATION:

Monitoring of unit costs associated with the main replacement program is critical to the success of this program. Using the A.M.R.S. System, the information received was not timely or formatted in the manner required.

Using the MacIntosh computer system, a new reporting system was designed and implemented. This new system provides the information in a much more timely fashion and provides vital information such as unit costs, including pro-rated overhead costs, dimensions and specifics of the various jobs, job cost broken down in regards to labour, equipment, material and overhead.

RESULTS:

This system provides a complete job breakdown by segment or component and gives the field foreman a computer printout of his job right after completion. It provides basis for comparison with other jobs; a good global picture of crew costs in relation to the total operation; a tool to identify discrepancies and areas to target for improvement.

PROJECT: Customer Satisfaction Quest./Update Customer Notification

IMPLEMENTATION:

A task force designed a questionnaire which asked customers what they thought of our service. These questionnaires were distributed to all customers who were directly or indirectly affected by repairs or maintenance work (approximately 5,000 customers).

When work performed by Waterworks affects a customer, a notice is left identifying the nature of the work. This notice gives a number to call for more information and what the customer is expected to do. There are fourteen different types of customer notices.

RESULTS:

The results of the questionnaires (4.5%) clearly identify that our customers are pleased with our various types of service (85-98% favourable response). These results also identify areas which can be improved on.

The result of our notifications is more customer awareness of the work being performed, the nature of the work and what the customer can expect.

FINANCE DEPARTMENT

The Finance Department provides professional financial management and transaction processing services to The City of Calgary; safeguards The City of Calgary's assets; collects revenues for The City of Calgary; collects monies for use of utilities; and provides Council, the administration, and the citizens of Calgary with accurate financial information. The department has approximately 385 employees.

PENSIONS, BENEFITS & PAYMENTS DIVISION

The Pensions, Benefits and Payments Division provides leadership, administration and coordination for corporate accounts payable, payroll, pensions and employee benefits.

PROJECT: Pensionable Earnings Balance Sheet (PEBS)

IMPLEMENTATION:

In 1988 an on-line system for processing, capturing, and recording employee account information was developed. The change has improved the efficiency in obtaining information and improved accuracy in the reconciliation of individual employer accounts and ultimately the Annual Reconciliation.

RESULTS:

Pensionable Earnings Balance Sheet (PEBS) is a summary of employee records and highlights what is pensionable. As an enhancement, it automatically calculates the high and low employee and employer pension contributions, identifies LTD (Long Term Disability) numbers, calculates arrears and what transactions have occurred to what accounts. PEBS is convenient to use because information is summarized and saves time. Previously, all of the above was researched on fiche and manually transcribed.

PROJECT: On-Line Timesheet Input system

IMPLEMENTATION:

A prototype of an On-Line Time Information System (OTIS) was developed for the Sewers Division, Engineering Department. This system allowed the division to have direct on-line input for its employees' timesheets into the payroll system.

RESULTS:

This has provided departmental control of all timesheet entries, and added a number of front line edit checks that have increased accuracy of the data being keyed. It has also allowed a reduction of $100,000 in data processing entry costs.

PROJECT: On-Line Signature Card System

IMPLEMENTATION:

In an effort to increase efficiency, accuracy and financial control, it was determined that the information contained on the manually controlled signature card files should be put on-line. All signature card data would then be made available on-line to those departments and divisions requiring this information.

RESULTS:

The on-line Signature Card System presently has 55 City employees authorized to access part or all of the information contained therein. The Purchasing Department now has better control when processing requisitions prior to raising purchase orders. Accounts Payable also has better control while auditing invoices for proper signing authority prior to processing them for payment.

FINANCIAL PLANNING AND BUDGET DIVISION

The Financial Planning and Budget Division coordinates the preparation and presentation of the City's annual operating and capital budgets. In addition, the division maintains ongoing control over budget appropriation and coordinates both monthly executive summaries and quarterly status reports, to monitor actual expenditures against budgets. The overall goal of the division has been to develop a budget process which is efficient, convenient for departments to use, and meets the budget information needs of the Commissioners, City Council and the public.

PROJECT: Capital and Operating Budget Computerization

IMPLEMENTATION:

In 1987, various summary schedules, previously produced manually, were computerized. As well, the system for tracking capital budgets through budget finalization and status reports was developed. This helped the operating departments and the Finance Department to accurately and easily monitor capital appropriations and capital financing requirements.

In 1988, the attention was turned to the operating budget. Several of the formats required for budget submission were revised to provide better information, and computerized for easier preparation.

RESULTS:

The benefits realized from both these projects included: better and more consistent budget information, greater accuracy, faster turnaround time, and great time savings for department accounting personnel, typists and Financial Planning and Budget staff.

UTILITY CUSTOMER ACCOUNTS DIVISION

The Utility Customer Accounts Division is responsible for the central account administration of billing and collecting electric, water and sewer revenue for The City's three operating utilities. The division provides a computerized billing system, meter data collection, customer services, and outstanding debt collection.

PROJECT: Hand-Held Meter Reading System

IMPLEMENTATION:

In 1987 January, a Request For Proposal was distributed to the vendor for the Utility Meter Data Capture System. This proposal detailed the unique requirements of The City to read electric and water meters.

The ITRON datacap devices were field tested in parallel with the existing card system. The System was implemented on schedule in 1988 February 01.

RESULTS:

The System led to increased Meter Reader productivity, reduction in the number of re-reads, increased controls, ability to check meter dials on-site, and overall job enrichment by using state-of-the-art technology.

Cost benefits included the:

- Elimination of five data entry staff positions $155,000/year
- Elimination of hardware and system access costs for the on-line entry system $ 25,000/year
- Elimination of computer produced meter reading cards and associated computer run costs $27,000/year
- Improved cash flow (one time) $ 23,000/year
- Total Cost Benefits $230,000

PROJECT: Utility Customer Information System (UCIS) Bill Correction System

IMPLEMENTATION:

Prior to March 1988, utility statements had to be manually re-typed if account adjustments were necessary. UCIS modification provides an on-line copy of the most recent utility statement. The statement is divided into sections and changes can be made where required without having to re-type statements. The statement can then print automatically. An audit trail is provided to list details on each account accessed and/or changed.

RESULTS:

This system alleviates the time consuming task of manually typing utility statements and speeds retrieval of required special bills. The division is able to issue new statements to the customer faster and provide better customer service.

PROJECT: A Utilities Newsletter (FEEDBACK)

IMPLEMENTATION:

"FEEDBACK", a utilities newsletter, is jointly prepared and funded by the Electric System, Engineering Department (Waterworks and Sewers), and the Utility Customer Accounts Division (U.C.A.D.). The quarterly newsletter, produced at a cost of 4 cents per copy, is included with the utility statements for distribution to approximately 260,000 customers.

RESULTS:

A regular proactive two-way communication link between the customer and the utility has been established. Communication between the utilities and U.C.A.D. has been enhanced, having a common project and goal.

TREASURY DIVISION

The Treasury Division is responsible for cash/investment/debt management, and cash handling and banking relationships.

PROJECT: Accounts Receivable Invoicing System (ARIS)

IMPLEMENTATION:

In October 1988, ARIS implementation converted the Ambulance Section from manual to automated invoicing. Work will commence in the fall 1989 to expand ARIS to automate all corporate sundry sector invoicing functions.

RESULTS:

The elimination and/or streamlining of tasks written for Ambulance Section has resulted in cost-avoidance savings, as well as improved invoice preparation and mailing time frames.

FINANCE AND ACCOUNTING DIVISION

The Finance and Accounting Division provides advice and functional control to all civic responsibility centres based on The City's controllership policy. The division provides direct accounting and budgetary services to staff and support departments, coordinates the development and operation of The City's computerized accounting and reporting system (AMRS), prepares The City's financial statements, and monitors The City's interests in certain related authorities.

PROJECT: Automated Financial Statements

IMPLEMENTATION:

A financial statement line identifying codes was standardized and a database table was developed to allow automated preparation of financial statements. Identifying (pointing) codes for each general ledger account were revised as required, to relate each to the appropriate financial statement line.

RESULTS:

The consistent application of account codes has resulted in more meaningful and accurate financial reports. In addition there has been a significant saving in setting up and maintaining the financial statement database.

PROJECT: Spreadsheet Download from AMRS

IMPLEMENTATION:

An AMRS/ESS (Electronic Spreadsheet) was introduced. This interphase program is menu operated and provides a pre-formatted spreadsheet to allow the easy transfer of data from the corporate accounting system to electronic spreadsheets. The program is used for more in-depth analysis of data.

RESULTS:

An efficient and effective method of retrieving data for a variety of purposes.

FIRE DEPARTMENT

The Fire Department serves The City of Calgary through a network of 28 strategically located Fire Stations. The department strives to improve service with progressive firefighting techniques and maintaining a modern fleet of apparatus. The department actively promotes fire prevention through building inspections and fire code enforcement provided by the Fire Prevention Bureau.

PROJECT: Revising Fire Department Recruitment Process

IMPLEMENTATION:

In 1988, the Fire Chief, Deputy Chief and Personnel Services Department organized a committee to review and revise the recruitment process used by the Calgary Fire Department. In addition Chief Officers, Training Division and Occupational Health & Safety personnel were brought in as required for their input on this project. The selection process was revised to allow for a more systematic approach to be used for selecting suitable candidates.

The testing procedures were modified to match actual field conditions and equipment used by the department. Standards were reviewed and revised to avoid any contravention of legislation.

RESULTS:

These revisions to the recruitment process will help the department field the best team possible of new recruits. The revisions also assisted in speeding up the reviewing process of candidates. The department also reduced the number of complaints and enquiries on the recruitment process which were experienced in previous years.

PROJECT: Hazardous Material Emergency Response Unit

IMPLEMENTATION:

In 1988, the Fire Department purchased a Hazardous Material Emergency Response Unit, that is now manned (by two men per shift) at Fire Station number 2, for response around the clock. This unit was purchased to improve the Fire Department's response to incidents where hazardous materials are, or may be involved.

RESULTS:

The department, since the purchase of this unit, has improved its response to this type of emergency. Previously, the the Hazardous Material Section's regular hours were Monday through Friday, from 08:00 to 17:00. Hazardous Material Officers would have to be called in for after-hour responses. This has also allowed the Hazardous Material Section to devote more time to preventative measures. These changes were accomplished by realigning the deployment of existing manpower at no cost to The City of Calgary other than the cost of purchasing the Hazardous Material Emergency Response Unit.

PROJECT: Re-certification Program for First Responders

IMPLEMENTATION:

The Fire Department has introduced a re-certification program for first responders. First Responders are Firefighters who have been trained to provide basic life support at an emergency scene until Paramedics are able to respond.

In the past, only selected personnel, usually senior Firefighters were selected and given First Responder training. A new program has been developed to re-certify First Responders by upgrading their Cardio-Pulmonary Resuscitation (C.P.R.) and other life support skills. In addition, the entire crew at a Fire Station is now upgraded in C.P.R. and is instructed how to properly assist First Responders at an emergency scene.

RESULTS:

The department has improved the quality of life support service at emergency scenes. The service is also more effective as the entire crew has received basic training and is able to operate as a team. This program has been implemented within the existing resources of the department at no cost to The City of Calgary.

PROJECT: Purchase of Facsimile Machines

IMPLEMENTATION:

Facsimile machines have been purchased to improve the communications system within the Fire Department and reduce the manpower and associated expenses of providing an internal mail service to over 30 locations. Before the purchase of facsimile machines, communications were picked up and delivered daily by the District Chiefs.

RESULTS:

The use of facsimile machines has improved communication within the department. Facsimile machines are available for use on a 24 hour basis.

The cost of facsimile machines should be recovered in the first year of operation by reducing gas consumption and maintenance of the District Chiefs' vans.

Intangible benefits related to availability of staff in district, improved service and productivity will also occur with the reduction of time spent in the communication distribution system.

LAW DEPARTMENT

The primary function of the Law Department is to provide counsel and legal advice to City Council, the Board of Commissioners, civic departments, and all authorities, boards, commissions and committees of The City of Calgary. Associated with that function are the Claims Division and Insurance/Risk Management Division, which form part of the Law Department.

ADMINISTRATION DIVISION

PROJECT: Law Department Trust Fund

IMPLEMENTATION:

A procedure to handle the trust fund has been set up to allow for effective control, reporting and audit trail.

The system developed for deposit and disbursement of funds held in trust serves as an accurate 'double check', at a glance.

RESULTS:

Each accounting period now provides a report showing trust balances in specific trust accounts. Benefits include: faster processing, reduced chance of error, and an improvement in overall productivity.

MECHANICAL SERVICES DEPARTMENT

The Mechanical Services Department provides vehicle, equipment and shop services to meet the operating requirements of The City of Calgary. There are 300 employees in six divisions.

FLEET MANAGEMENT DIVISION

This division arranges the provision of vehicle/equipment fleet services to The City; acquires appropriate fleet units; replaces fleet units to minimize overall costs; and ensures effective use of City fleet units.

PROJECT: Heavy Equipment Disposals

IMPLEMENTATION:

The City has traditionally disposed of heavy equipment through advertising in various papers and magazines. This process is cumbersome administratively and involves handling numerous phone calls and requests to see/drive/inspect what is for sale, all of which often result in poor responses and "fire sale" bids.

As an alternative to this process, a local auction agency specializing in heavy fleet was contacted. It takes the fleet units to its yard, advertises them all over North America, deals with all potential customer queries and sells them on behalf of The City, averaging 20 - 70% more than realized previously.

RESULTS:

This process has cut the administrative work involved for M.S.D. by 80% and has increased the return to The City by 20% (approx. $400,000 for 1988) based on representative comparison with previous years' disposals.

PROJECT: Light Vehicle Fleet Disposals

IMPLEMENTATION:

The City traditionally held its own light fleet auction, on its own premises, run by a local auctioneer. These auctions were held twice a year (spring/fall). Organizing this type of auction poses numerous problems. Fleet is often stored for six months or more, prior to the and sale, during that time the batteries go dead, the tires go flat, etc. and the unit depreciates. It takes significant work (up to three months) to organize each auction.

As an alternative, a light fleet auction agency who runs "drive thru" auctions on a weekly basis was contacted. The agency picks up the vehicles, takes them to its site, cleans them and sells them, netting slightly higher prices than The City auction. As the auctions are run regularly throughout the year, excess City vehicles can be disposed of immediately, avoiding vehicle deterioration and depreciation.

RESULTS:

It is estimated that this initiative saves the City $30,000/year at minimum through reduced cost of preparation for sale and the faster conversion of unproductive fleet into cash. Borrowing requirements for replacement fleet are also reduced.

PROJECT: Hired Trucker Contract Negotiation

IMPLEMENTATION:

The City has obtained hired trucks and drivers through the Alberta Trucking Association. Work was distributed to each driver on a seniority basis. This had caused problems for the drivers and administration, as senior truckers, usually completing their jobs first, could "bump" junior truckers out.

An alternative arrangement was reached with the Alberta Truckers Association. The City will provide guaranteed work packages in exchange for an eight percent drop in cost to the City. Under this new agreement, The City will employ a specific number of truckers for a guaranteed number of hours. Each trucker will be assigned based on seniority and no "bumping" will be allowed.

RESULTS:

This initiative provides the truckers with some security and stability. It reduces administrative effort for The City. It provides each City operation with the same trucker, every day, reducing training. Lastly, it is available at a reduced cost of 8%, which is estimated to save the City $80,000 in 1989.

SHOPS & EQUIPMENT DIVISION

The primary function of the division is to maintain The City's fleet of mobile equipment and provide contractual services in the mechanical field.

PROJECT: Relocation of Light Equipment Service Shop

IMPLEMENTATION:

Since 1970, The City's light equipment was serviced out of the Mayland Heights facility. In 1986, this facility's activity was reduced to the level of a satellite shop. In 1988, it was determined that the appropriate level of light equipment maintenance could be effected by utilizing a portion of the Body Shop at Manchester, with minimal modifications. The space released at Mayland Heights was taken over by other departments, instead of leasing other space at an additional cost to The City.

RESULTS:

The Purchasing and Stores Department, who had to vacate the Eau Claire site, was able to relocate its LRT stores to the vacant space. Annual savings of approximately $100,000 are realized in space rental charges.

PROJECT: Mobil Sweepers Rear Axle Modification

IMPLEMENTATION:

Frequent failures of the two-speed rear axles on the Mobil Sweeper were occurring. As a result of an employee suggestion, a safety limit switch was installed which prevented the axle speed range being changed except when reverse gear was selected. This prevented changes while the vehicle was in motion and allowed the shift mechanism to operate only while the drive line was not under load.

RESULTS:

This inexpensive modification was installed on all 32 Mobil sweepers, and reduced the number of differential failures from approximately eight per year to two. This resulted in an annual saving of $32,000, and also reduced downtime and inconvenience to the user department.

GARAGE DIVISION

The division is responsible for repair and preventive maintenance of the fleet of City-owned vehicles and associated mounted pieces of equipment on a timely, scheduled (where possible) program in an efficient, cost effective manner.

PROJECT: Use of Bulk Oil in Services Areas

IMPLEMENTATION:

Three large oil tanks were installed in the Garage Division Manchester Shop to accommodate bulk oil delivery.

RESULTS:

Net annual savings of $13,000 have been realized. This results from reduced material and labour costs. The supplier now fills the oil distribution system directly from a tanker truck. A similar system has been installed in the Equipment Shop. This is expected to increase the annual savings.

PROJECT: Engine Air Filter Maintenance

IMPLEMENTATION:

Installation of filter restriction indicator gauges on engine air intake systems has dramatically reduced man-hours required to service the truck fleet. Indicators with built-in memories allow the

servicemen to complete regular inspections much faster. Precise measurement and confidence in data obtained from the indicators has allowed extended filter life without compromising fuel economy or engine life.

RESULTS:

During the past two years air filter replacement costs have been reduced by an average of $29,300 per year. Savings are expected to continue and increase as more of the fleet is converted to diesel power.

ACCOUNTING SECTION

The division provides controllership function and administers the Corporate employee local travel plan.

PROJECT: Fixed Asset System

IMPLEMENTATION:

In the past the department's fixed assets were managed through a manual card system. A computerized Fixed Asset System was developed and implemented for the 1987 year-end.

RESULTS:

The computerized Fixed Asset System has led to a more effective and efficient approach to managing the department's $68 million of fixed assets. Timely reports for asset purchases, disposals, transfers, depreciation and forecasting can now be easily, quickly and accurately generated whenever required rather than only once a year under the old manual system. Such information has assisted management in the decision- making process and enabled the department to complete its year-end reporting ahead of its deadlines. Hundreds of work-hours required yearly to perform tedious, repetitive calculations are eliminated. Simplicity allows ease of training and rotation of staff onto the system. Over 3,000 cumbersome manual cards have been eliminated.

PROJECT: Hired Truck Accounts Payable System

IMPLEMENTATION:

Hired truck payments used to be processed through a manual accounts payable system. A computerized Hired Truck Accounts Payable System was developed and implemented.

RESULTS:

The computerized Hired Truck Accounts Payable System has led to a more effective and efficient approach to managing the department's hired truck payments of $2 million annually. Timely reports can now be easily, quickly and accurately generated. Documentation of hours and rates is provided to hired truckers with each payment. This has resulted in a dramatic decrease in queries. Detailed

computerized information of hired truck usage is also supplied to user departments to facilitate the accounting process.

Instantaneous response to queries is available to the user. The new system has resulted in better working relationships between Mechanical Services Department, other City departments and hired truckers. Two hundred work hours are eliminated yearly. Also, time constraints and work loads have been evened out to eliminate the necessity for staff overtime. Simplicity allows ease of training and rotation of staff onto the system.

PROJECT: Bank Time System

IMPLEMENTATION:

The departmental timekeeper was responsible for manually tracking banked time which is wages or paid time owed to an employee due to vacation, holiday, overtime, relief, or days off. Inadequate procedures were in place to audit the accuracy of recorded information. Also, reports were not available to inform the employee of his entitlements, or for him to verify the accuracy of the information. Management was not informed as to the extent of each category of banked time. The total liability of owed banked time at MSD was unknown.

The banked time recording procedures were analyzed and refined. Information was compiled into employee and departmental master files and a suite of reporting programs was developed. These files may be accessed on-line using the WATFILE PLUS data manipulation systems on the City AMDAHL mainframe computer.

RESULTS:

Reports are now available for the departmental timekeeper to quickly and easily audit and review banked time to perform year-end reporting. Employees now receive current records for their perusal and sign-off. Managers receive reports on demand by department and/or union to analyze overtime and vacation balances. The accounting area has available reports on The Corporation's liability due to accumulated banked time for year-end financial statements. The system is easily modified for organizational changes and new union contracts. The system has been reviewed by other departments and is currently being installed for use by the EMS and Finance Departments.

PERSONNEL SERVICES DEPARTMENT

The role of the Personnel Services Department is to formulate, implement and monitor corporate personnel policies, human resource management programs and training functions. Services are provided in job evaluation and compensation administration, personnel information systems, labour relations and negotiation, training, services improvement and organizational development to maximize organizational effectiveness and accomplishment of corporate objectives.

WAGE AND SALARY DIVISION

The Wage and Salary Division is responsible for coordinating and administrating compensation programs and policies in a consistent and equitable way throughout The Corporation.

PROJECT: Project Control and Time Reporting Systems

IMPLEMENTATION:

In order to provide high quality service on a timely basis to client departments in evaluating and classifying of positions for salary administration purposes, the Time Reporting and Project Control Systems were developed in 1986/87. The objective was to enable the division to more effectively plan, organize and manage its workload.

RESULTS:

The Project Control System provides detailed statistical reports outlining the number of job evaluation reviews; in addition, it tracks, projects, and highlights those that exceed the division's time standard. The system has assisted staff to set priorities and organize workloads, and allows them to accurately report timelines and target dates to clients.

The Time Reporting System generates detailed information on staff hours expended in fulfilling major programs and project responsibilities. It assists in developing realistic work plans and resource allocation.

PLANNING AND BUILDING DEPARTMENT

The Planning & Building Department administers and enforces provincial and municipal legislation related to planning, development and construction within the city, and advises City Council on matters of policy within that framework.

In 1988 the department had a total of 238 staff in four divisions: Building Regulations; Development, Land Use & Downtown; City and Community Planning; and Planning Services.

PROJECT: Action Plan - Corporate Values

IMPLEMENTATION:

The Corporate Values process was introduced to the department in 1987. In 1988, the process was used to investigate how the Corporation's five Basic Values were integrated into our daily routine. The staff identified 36 on-going actions which enhanced our successful operation. The staff also suggested 34 new actions that will make our day-to-day operations even better from an individual and departmental point of view.

RESULTS:

The department encouraged the staff to voice their concerns about our operations in a non-threatening forum. The staff has taken up the challenge to be involved and make a very good department even better.

BUILDING REGULATIONS DIVISION

The Building Regulations Division ensures that construction taking place in Calgary meets minimum requirements with respect to the safety of buildings in terms of public health, fire safety and structural sufficiency. This is accomplished through examining plans and inspecting buildings to determine compliance with the various codes and by-laws.

PROJECT: Plumbing and Gas Section Computer System

IMPLEMENTATION:

A project team consisting of members from the department as well as from DPSD reviewed the existing system and studied ways that the computerized system could better handle the tasks. The existing system was radically altered and the daily work functions were realigned and changed.

RESULTS:

The new system has benefitted the division, the department, other departments and the plumbing contractors. There is less chance of error in permit fee calculations. Reports generated are used for internal accounting purposes and are distributed to the industry for its use. The system provides access to other systems and allows other departments access to our system, thereby sharing vital information that previously had to be acquired manually. The system allows the inspector to concentrate on dealing with contractors rather than sorting, filing and recording documentation. It allows management to distribute workloads more equitably.

PROJECT: Joint Agreement between Fire Prev. Bureau & Bldg. Reg. Div.

IMPLEMENTATION:

The Building Code, used by the Building Regulations Division, addresses the physical structure of a building and its component services. The Fire Code, used by the Fire Prevention Bureau, primarily addresses the activities that take place within a completed building but is also concerned with fire hazards that could develop as a result of construction operations. To avoid problems due to the overlap of the codes, an agreement was reached which specifies the responsibilities of each area.

RESULTS:

The new agreement shows the respect that each division has for the other but, as Fire Marshal Parker pointed out, the big winners are the citizens of Calgary who can continue to expect a high level of safety in the buildings they enter.

PROJECT: Pamphlets for Commercial Plans Examination

IMPLEMENTATION:

The Commercial Plans Examination Section recognized a need to provide drawing standards for commercial projects. Not all applications are submitted by professional draftspeople. This caused confusion as to drawing standards necessary for permit application. The section prepared two pamphlets - "Examples of Required Plans" and "Alterations to Non-Residential Buildings" to clarify these requirements.

RESULTS:

Establishing drawing standards benefit the public in that they are aware, as requirements are clearly explained so only one submission is necessary for permit application. Permit issuance is quickened since less discussion is needed to explain requirements.

PLANNING SERVICES DIVISION

Planning Services performs technical and administrative functions for the Planning & Building Department including controllership and accounting; administrative and payroll; drafting, graphics and maps; library and information services; word processing; records management; and coordination of computer systems.

PROJECT: Computer Mapping

IMPLEMENTATION:

The department's base map and land use designation map needs are now fully accommodated within the computer mapping system. Land use maps were computerized in 1986, which provided a very important tool for department reports, but the 1988 conversion results in day-to-day mapping needs being accommodated on computer (e.g., land use maps for decision making, for the public, etc.). This accomplishment was a major milestone in the department's computer mapping program.

RESULTS:

For the public and internal users, improved map quality for reference and for derivation products; for the division, map maintenance is faster and the product provides a much better base for producing more and better map products.

PROJECT: Desk Top Publishing

IMPLEMENTATION:

An Apple MacIntosh (Desk Top Publishing Unit) was installed in 1988, staff were trained to use it, and several applications formerly prepared manually, are now on computer.

RESULTS:

For the preparation of planning documents, signs, posters, etc., the result is a faster process, higher quality and a product well received by department users.

CITY AND COMMUNITY PLANNING

The City and Community Planning Division prepares strategic planning and research studies for The City as a whole, and prepares and implements Area Redevelopment Plans, Area Structure Plans and other planning studies for new and established communities.

PROJECT: Community Report System

IMPLEMENTATION:

The Community Report system provides address labels and a report which lists data such as address, owner, parcel size, land use designation, etc. In 1987, the system was enhanced to allow the user to separate absentee from resident property owners. Mailing labels can now be produced for all property owners or absentee owners only. This avoids duplication in community-wide mailouts where household mail drops are used.

RESULTS:

Information is now delivered to resident owners and renters by household mail drop (AD MAIL) and to absentee owners by regular mail. Savings in mail costs resulted.

For example, there are approximately 2,800 households in the community of Forest Lawn, 650 of which are absentee owners. Prior to this system enhancement, the mailing costs would have been 2,800 at 37 cents + 2,800 at 7.8 cents = $1,280.

The costs using the absentee owner labels eliminated duplication of notification for resident owners and saved 2,150 thirty-seven cent stamps. Only 650 letters at 37 cents ($240) were mailed out.
The remaining 2,150 were delivered by 7.8 cents mail drop at a cost of $170.

The savings in mail costs alone, in this example only, were $870 (68%).

Annual savings of over $1,000 are estimated. In addition to the dollar savings, the City portrays a more fiscally responsible image by eliminating this duplication.

DEVELOPMENT, LAND USE & DOWNTOWN DIVISION

The Development, Land Use & Downtown Division is responsible for processing development permits, land use redesignation applications and for different aspects of planning in the downtown. In addition, the division provides support service to the Calgary Planning Commission.

PROJECT: New Sign Permit

IMPLEMENTATION:

After careful review of the old sign permit application form, it was found to be too time consuming for everyone (public and administration). The information asked for was repetitive. The two-part form required transferring of information from the application to the sign permit.

RESULTS:

One form with three copies is completed entirely by the applicant. Information is clearer for the counter staff and the transfer of information is eliminated.

Considerable cost savings occurred through the reduction of clerical help.

The application is better understood and accepted by the sign industry and is less work for the sign inspectors.

PROJECT: Disabled Access Design Guidelines

IMPLEMENTATION:

This document has been prepared in the Planning & Building Department under the guidance of the Disabled Access Review Committee. Input was from a broad range of sources, such as building codes, U.S. state and Canadian provincial regulations, as well as input from user groups. These guidelines are intended as a single-volume reference guide to assist the Disabled Access Review Committee in reviewing plans for new city buildings and structures as well as renovation projects. The guidelines will be monitored and upgraded on an annual basis and are self-explanatory in content. The guidelines have been transmitted to local architects and engineers, and provincial and national building officials.

RESULTS:

Response received to date has been very complimentary and indications are that the guidelines will be used as a working reference guide for improving accessibility on a local and national level as well as intended for City-owned facilities. Also, the guidelines have been highly recommended and supported for awards as follows:

- C.A.M.A. (Canadian Association of Municipal Administrators) Awards Program.
- A.A.C.I.P. (Alberta Association Canadian Institute of Planners) - 1989 Planning Awards.

PROJECT: Advertising Development Permits

IMPLEMENTATION:

On a weekly basis the department advertised Development Permits in the local newspapers. The cost of this advertising comes out of the department's budget. Refinements have been made to the description of the Development Permits that go into the weekly advertisement, as well as a rationalization of the space for each advertisement.

RESULTS:

It is estimated the space saving achieved a total of $21,417 in the 1988 budget.

PUBLIC INFORMATION DEPARTMENT

The Public Information Department provides City departments and citizens of Calgary with professional communications and information services to enhance awareness and understanding between The Corporation and the community it services. The department employes 46 staff in three divisions.

ADMINISTRATION DIVISION

This division provides administrative and project management on major projects which involve numerous departments, public organizations as well as legislative participation.

PROJECT: Electronic Media Network

IMPLEMENTATION:

In cooperation with Data Processing Services Department, a computer network was designed and installed prior to the Olympic Winter Games, allowing City news information to be distributed electronically to 19 local media outlets simultaneously. The network also allows critical response departments (Police, Fire, Emergency Medical Services and Electric System) to send news releases from the field.

RESULTS:

Quicker, more cost-effective communication to Calgary media. The project has resulted in substantial savings in traditional distribution costs and staff time. This system ensures that The Corporation will be able to supply the required response to the news media and public in the event of a major emergency or peacetime disaster.

PROJECT: Special Events Contact System (SPECS)

IMPLEMENTATION:

The department created an on-line information database containing over 500 items to assist staff in locating and accessing support supplies and contractors for civic special events and promotional activities.

RESULTS:

More efficient and consistent use of outside resources for special events and similar programs.

PROJECT: Customer Service Program

IMPLEMENTATION:

Although many departments provide good customer service training to front-line staff, The Corporation did not have a "core" customer service training program. In cooperation with customer service representatives from Engineering; Finance; Calgary Parks & Recreation; Transportation; Electric System; Planning & Building; Assessment Tax & License; Aldermanic Office and staff resources from Personnel Services Department, a two-year development program was initiated in 1987. Majo r components of the program include core customer skills training, integration of customer service into the job classification system, and employee orientation. After assessing the Corporation's needs, identifying key customer service principles and evaluating existing training programs, a customized training program was developed in-house.

RESULTS:

The course has been piloted and is in operation. Work on other aspects of the program is continuing into 1989.

ADVERTISING AND PUBLIC RELATION DIVISION

This division offers a blend of creative and advisory services supported by print, video and electronic communication aids, plus advertising and graphics services. By interacting with all departments in The City, the division gathers, compiles and conveys information to the community about the business and services of the Corporation. The division operates with two service sections.

PROJECT: Computer System for Typesetting and Artwork

IMPLEMENTATION:

The Graphics Unit has implemented systems for developing layouts and illustration to camera ready art. In addition, the software system "TOPS" has been developed whereby all future typesetting requirements for all advertising and major publications will be programmed in-house.

RESULTS:

It is estimated that cost savings in outside expenditures in the first year of operation should exceed $50,000. More effective use of staff time and faster turn around on each project has allowed the unit to handle the increasing workload experienced in 1988.

PROJECT: Media Buying System

IMPLEMENTATION:

In early 1987, extensive research was conducted by the Advertising Section to establish what software packages were available to make the Media Buying Unit more cost effective. The City currently purchases approximately $1.7 million in media annually and the Media buyer spends, on average, three hours or more in the preparation of a media plan.

RESULTS:

In August 1987, in consultation with Data Processing Services Department Client Services, the Harris Media Buying System was installed at an annual operation cost for software of $3,600.00. The system is projected at a minimum of 10% reduction on the current yearly volume of $1.7 million. This saving is based on increased effectiveness and accuracy in forecasting on each media buy.

PROJECT: Client Contact Sheets

IMPLEMENTATION:

A client contact sheet was developed and designed to facilitate faster and better communication with the department.

RESULTS:

Recording of project meetings, informing staff of their involvement in upcoming projects, and keeping management up to date is all accomplished in a fast and simple manner.

INFORMATION CENTRE

The Information Centre is a centralized multi-component service providing an entry point for citizens to resolve their concerns or needs. The five main services provided by this division are: Information and Referral; Civic Information and Complaints; Landlord and Tenant Advisory Board; Municipal Building Information and Direction Kiosk; and Telephone Switchboard.

PROJECT: Numbers You Asked For Brochure

IMPLEMENTATION:

Development of the 'Numbers You Asked For' brochure was stimulated by an enquiry from the former Director of Planning and Building. The brochure contains the telephone numbers most frequently requested by the public from the City Hall Switchboard and the Municipal Building

Information Kiosk. Over 280 telephone numbers of City departments, elected officials, Federal and Provincial government offices and other outside services are listed by subject.

RESULTS:

Consistent, accurate information produced in a convenient form (brochure) has resulted in increased customer satisfaction.

PROJECT: Computerization of Resource File Data Base

IMPLEMENTATION:

With programming guidance from the Data Processing Services Department, the Information Centre's manual Kardex Agency Resource File and the Calgary Community Service Directory are now available on mainframe. Computerization of the data base has provided staff with the ability to quickly search and identify services available to the public. The resource file contains approximately 1,000 people-helping agencies, the services they provide, the agency contacts, and telephone numbers.

RESULTS:

The timely, accurate and consistent information provided on-line has improved internal communications and the quality of information given to the public. Updating costs associated with the manual system have been drastically cut. More specifically, staff time to update the directory has been decreased by 30%.

PROJECT: Daily Work Schedule Quick Note

IMPLEMENTATION:

The 'quick-note' portion of the daily work schedule is the logical extension to an earlier employee suggestion that dedicated space on the schedule printout for Olympic update information. The schedule is drafted and circulated to all staff on a daily basis. The 'quick-note' section provides timely information about important current events and other activities that the public might enquire about.

RESULTS:

The timely, accurate and consistent information provided in the 'quick-note' has improved internal communications and the quality of information given to the public. The cost to produce memos and the photocopying of materials for circulation to staff has been greatly reduced. There has been a 90% reduction of the internal communication memos distributed within the Information Centre.

PURCHASING AND STORES DEPARTMENT

The Purchasing and Stores Department purchases materials, equipment and services for all departments of The City, amounting to $200 million dollars in 1988. It is also responsible for the physical and accounting control of some $31 million dollars worth of inventories maintained in 17 Stores locations throughout The City.

PURCHASING DIVISION

The division provides purchasing services for all departments of The City. Sub-programs include specifications in tendering, ordering, expediting, sale of scrap and surplus materials, and maintenance of records. Centralization of purchasing responsibility provides one authority for all matters relating to supply and tendering and one source to which enquiries can be directed.

PROJECT: Traffic Management Program

IMPLEMENTATION:

A pilot project on traffic management for goods purchased by The City was implemented in September of 1987. Prior to that time, goods were mainly bought F.O.B. destination which meant the supplier paid for the freight and passed it on in the price of the goods. With de-regulation of the transportation industry, potential savings in this area were identified. Agreements were made with several transportation firms and a traffic consultant who ensured The City obtained the best freight rates possible.

RESULTS:

Since implementation of this project, actual gross savings of $200,000.00 have been realized.

CENTRAL STORES DIVISION

The division provides for the physical care, control and security of a wide range of materials used by operating and administrative departments. It maintains a computerized inventory control system and provides accounting control for the major City inventories.

PROJECT: Disposal of Obsolete Inventory

IMPLEMENTATION:

Enhancements to the existing reporting system for slow moving inventory provided for more indepth analysis of obsolete items maintained in inventory at various Stores locations.

RESULTS:

There was a substantial increase in the amount of obsolete parts removed from inventory resulting in improved utilization of existing warehouse space and reducing the number of items previously reported for devaluation.

PROJECT: Release Order System

IMPLEMENTATION:

The existing standing purchase order system was expanded to cover the purchase of a substantial amount and variety of items maintained in Central Stores Inventory. Stores personnel were permitted to initiate releases against these orders directly to suppliers for on going replenishment of inventory.

RESULTS:

Improvement has been noted in the turnaround time to replenish Stores stock, further reducing potential stock outages and providing more current information on the status of outstanding orders.

SOCIAL SERVICES DEPARTMENT

The Social Services Department delivers to the citizens of Calgary, through public or voluntary auspices, selected social services in the most professionally effective method and cost efficient manner. Many services are delivered on a decentralized, neighbourhood office basis.

FAMILY AND COMMUNITY SUPPORT SERVICES DIVISION

The division is a cost-sharing partnership between The City and the Province of Alberta to provide preventive social services and programs that emphasize the strengthening of family and community.

PROJECT: Special Needs Transportation Unit

IMPLEMENTATION:

Approximately 500-600 renewal letters are mailed to Special Needs Taxi Service clients each month. The package mailed to clients includes a renewal letter, a renewal application, and instruction sheet. In preparing the package to be mailed, clerical staff would attach mailing labels to the envelopes and then match renewal letters with the mailing labels on envelopes.

The renewal letter was re-designed so when folded, the client's name and address would be visible through a windowed envelope. This eliminated the need for mailing labels and matching the client with mailing labels on envelopes.

RESULTS:

The time spent preparing the renewal packages each month has been reduced from three to two working days.

PROJECT: Special Needs Taxi Service Card Holders

IMPLEMENTATION:

Approximately 500 - 600 Special Needs Taxi Service identification cards are mailed to clients on card holders each month. Identification cards were affixed to card holders by tape or glue, placed in an envelope and mailed to clients.

The card holder was re-designed with two slits so that the edges of the identification cards could be inserted into the slits, thereby eliminating the need for taping or gluing.

RESULTS:

The time spent preparing identification cards for mailing to Special Needs Taxi Service clients was reduced by approximately 40 per cent.

PROJECT: Sr. Citizens Transit Pass Card Holders and Renewal Sticker

IMPLEMENTATION:

Approximately 30,000 Senior Citizens' Transit Passes are renewed annually. Transit passes are mailed to Senior Citizens Transit Pass clients upon receipt of their renewal fees. Mailing labels were affixed to the card holder and the identification card was matched to the client's name, taped or glued to the card holder, placed in an envelope, and mailed.

The card holder was re-designed as a continuous form with two slits so the edges of the transit passes could be inserted into the slits, thereby eliminating the need for taping or gluing of transit passes to card holders. In addition, clients' names and addresses are automatically printed on the card holder, eliminating the need for mailing labels. For those clients who have an embossed card, a renewal sticker was designed to be placed on the transit pass

RESULTS:

The time spent placing mailing labels and transit passes on the card holder was reduced by approximately 40 percent. The cost of purchasing new transit passes was approximately 16 cents per card, whereas the cost of the renewal stickers was approximately 5 cents per card. There was also an additional saving of wear on the electronic embosser.

RESEARCH AND PLANNING UNIT

PROJECT: Youth Employment Study

IMPLEMENTATION:

On 1987 April 01, the Social Services Department's Youth Employment Centre began its program. In anticipation of this program, a study of sixty employed and sixty unemployed Calgary youth was conducted, partly to determine those services that would be most beneficial to unemployed youth.

RESULTS:

As one result of this study, which showed that formal social supports (e.g., counselling) were important in mitigating adverse psychological effects of unemployment among youth, professional counselling services were included as an integral part of the Youth Employment Centre's program. In a recent evaluation of the program by an external consultant, this feature was cited as a positive benefit to clients.

PROJECT: Social Services Department Library

IMPLEMENTATION:

The system for cataloguing and borrowing books, periodicals, newsletters, and City of Calgary reports in the department library was time-consuming and confusing. In early 1988, a staff person was assigned to develop and assess alternative systems for the department library.

RESULTS:

A simplified cataloging and self-service borrowing system was developed and instituted. Use of the library by department staff has increased and the time to catalogue new acquisitions has been reduced.

SPECIAL PROJECTS DIVISION

The division provides special services to Calgary residents. Through "Shopper Services," home services such as minor repair, interior and exterior painting, yard maintenance, snow removal, and shopping are provided to senior citizens and handicapped persons on fixed or limited incomes. These services are often provided through training programs for individuals who require experience in developing skills to obtain employment.

PROJECT: Trainee Orientation Package

IMPLEMENTATION:

A revised orientation package has been established for all new participants coming into the program. The purpose of this project was to clearly define expectations, responsibilities and direction for all new participants in the Work Activity Project.

RESULTS:

- All new trainees have a clear understanding of their responsibilities and expectations of the Work Activity Project.
- Feedback from the foreman and teachers has shown that new trainees have easily settled into the work or school role. There have been fewer misunderstandings and directions required.

PROJECT: Client Priority List

IMPLEMENTATION:

Project Home Help clients were surveyed to determine clients with highest need, frequency of service received, and seniority of service. Based on these criteria, a client service priority list was established.

The purpose was to give service priority to eligible clients who have been identified as most in need of receiving seasonal home and yard maintenance services on a regular basis. As these services are in heavy demand, the priority list ensures those identified clients receive regular, quality service without resorting to the frustrating and unreliable "first-come, first-served" method.

RESULTS:

- Increased efficiency has been achieved to schedule jobs at job sites in closer proximity, thereby reducing worker travel time costs.
- Feedback from the current client group indicates considerable support for the system, while fewer complaints have been registered for perceived undue delays in service, or failure to receive service.

PROJECT: Training for First Aid Instructor

IMPLEMENTATION:

A work crew foreman has been trained as a qualified First Aid Instructor. He provided workshops on First Aid procedures to all participants of the Work Activity Project.

The purpose of the project was to have all participants aware of what to do and what not to do at the scene of an accident.

RESULTS:

- Every participant completed the workshop successfully.
- By taking the workshops, participants have been able to respond to such accidents as cuts, minor eye irritations, and shock.
- Feedback has shown that most participants have requested further workshops on First Aid procedures.

NEIGHBOURHOOD SERVICES DIVISION

The division provides and manages decentralized social services such as juvenile probation, day care, outreach and community services designed to assist groups to form and develop to meet social needs.

PROJECT: Probation Services Computerized Pre-Disposition Reports

IMPLEMENTATION:

Staff from the Neighbourhood Services Division are responsible for writing Pre-Disposition Reports on Young Offenders for the Provincial Court of Alberta, Youth Division. This consists of an

eleven-page typed report. This report has now been formatted on the IBM PC's, using the Word Perfect package. Assistance was provided by the Data Processing Services Division.

Previously, this report would take approximately four hours to type, allowing for correction time. The same report can now be typed in approximately two hours.

RESULTS:

In 1988, contract negotiations expanded services provided to young offenders and their families by The City Social Services Department. The average number of Pre-Disposition Reports completed each month during the past four months was 74. Secretarial staff has increased by one position. This new method of producing Pre-Disposition Reports will result in significant time savings.

PROJECT: Young Offenders Unified Probation Services

IMPLEMENTATION:

Unified Probation Services was the congregating of all the young offenders programs under one jurisdiction.

In October 1988, all young offenders programs were transferred from the Solicitor General's Department to be collectively administered by The City of Calgary Social Services Department. Prior to this transfer, young offenders were divided between the Solicitor General's Department and City Social Services depending on their ages and/or programs. For example, a youth under sixteen may be under the City Probation Office for probation, yet, if placed in custody, a community investigation would have been completed by a Solicitor General's worker.

RESULTS:

The benefits of the unified services in probation are:

- Better service delivery to young offenders and their families, as they now only deal with one agency.
- The role of City Social Services has become more of a social casework function for young offenders.
- This consistent service allows for better rapport with collateral agencies (police, schools, group homes, etc.).
- The change has provided more control and monitoring over long range goals with youth, especially repeat offenders.
- Data is more easily maintained for statistical or future programming needs.

PROJECT: Youth Employment Centre

IMPLEMENTATION:

In 1985, the Mayor's Task Force on Youth Employment together with a study conducted by the Social Services Department about the Effects of Youth Unemployment in Calgary, determined that a serious problem existed with unemployed youth and the delivery of services to this particular segment of the population.

In response, a two-year demonstration project was officially launched on March 26, 1987. The project employs a Co-ordinator, four Counsellors, a Work Experience Officer and a Secretary and is jointly funded by Canada Employment and Immigration, Alberta Career Development and Employment, and The City of Calgary.

RESULTS:

In the first year of operation, the Youth Employment Centre provided a wide range of services to over 2,000 youth, aged 15-24. Services included job search/employment preparation activities, life skills training, personal/employment/career counselling, job referrals, follow-up, work experience, certification to provincial youth wage subsidy programs, screening and referral to federal job training programs and a Volunteer Program.

An independent program evaluation concluded that the program provided many benefits to youth and recommended continuation.

ADMINISTRATION DIVISION

PROJECT: Office Automation

IMPLEMENTATION:

In 1987 and 1988 an office automation study, including a management training system, identified computer requirements within the department.

RESULTS:

Each major operating activity has IBM standardized computer work stations. In addition, clerical staff have uniform training and can be reallocated among various activities to meet work priorities, providing the department with additional skills, improved reporting, and flexibility.

Information which was difficult to produce is now available.

PROJECT: Re-accreditation of Services

IMPLEMENTATION:

In June 1988, a site visit by three peer reviewers under the auspices of the Council on Accreditation of Services for Families & Children (New York) examined the services of the Social Services Department as to compliance with the standards set by the Council. A project team within the Department submitted a comprehensive re-accreditation document for review by both the Council and the Child Welfare League of America.

RESULTS:

As of December 31, 1988 the Social Services Department received notice that the re-accreditation was successfully achieved. This process has allowed the Department to examine its services in detail and address areas needing improvement as well as acknowledge the high quality of service in place. Adherence to the standards set by the Council on Accreditation means international recognition as an accredited agency.

TRANSPORTATION DEPARTMENT

The Transportation Department ensures Calgary has a transportation system which meets the needs of Calgarians in an efficient and safe manner. This is achieved by careful planning for all transportation modes; effective operation of the current street system through appropriate traffic control; and provision of safe, effective and efficient public transit service. The department is made up of seven divisions and has more than 1,700 employees.

CALGARY TRANSIT DIVISION

Calgary Transit's approximately 1,400 employees operate and maintain a fleet of 582 buses, 83 light rail vehicles, 3 paratransit vehicles, and related support vehicles to provide safe, effective, and efficient public transit service within Calgary. Calgary Transit strives to provide accessibility to all areas of the city for both work and non-work activities.

PROJECT: Tire Groover

IMPLEMENTATION:

Two Calgary Transit Maintenance Machinists and a Welder designed a new tire groover (a device that can cut grooves in "bald" tires that still have enough rubber left to be safe after regrooving) which was then manufactured in the Calgary Transit Maintenance Section Machine Shop. The groover can be rolled under a bus to regroove the tires without removing them from the bus.

RESULTS:

Reduces regrooving time and cost by 75% and eliminates tire casing damage, thus reducing bus downtime while providing more efficient service.

PROJECT: HASTUS Scheduling and Runcutting System.

IMPLEMENTATION:

The HASTUS computer software package was installed to upgrade the computer technology available for scheduling and runcutting (dividing transit work into pieces that can be done by individual Transit Operators). Using the new tool, a team approach among Service Development staff resulted in significant productivity gains.

RESULTS:

The primary measure of productivity improvement is increased utilization of Transit Operator time, providing an additional 35,000 hours of service per year with the same work force.

During the implementation period for the project, the new software saved more than the development cost of $500,000. Since being fully implemented in 1987, the cost avoided by not having to hire new operators is more than $1 million per year when compared to the previous system.

PROJECT: Repair of Rubber Articulation Bellows on LRT Vehicles

IMPLEMENTATION:

A Calgary Transit Maintenance Body Shop employee found a new way to repair rather than replace the rubber articulation bellows on LRT vehicles using a liquid rubber silicon. The bellows are the flexible sections in the middle of each vehicle that allow them to bend when going around curves.

RESULTS:

By reducing material cost and repair time on ten units per year, Calgary Transit realizes annual net savings of $41,774.60.

FINANCE AND ADMINISTRATION DIVISION

The division provides a controllership function and staff support services to all divisions of the department and various related authorities.

PROJECT: Cash Box Assembly Modification

IMPLEMENTATION:

Employees in the cash handling equipment repair area determined that when any of the 700 plus farebox and ticket-vending machine cash boxes were required to be taken apart for repair, they could replace one of the "hard to get at" screws with a shorter screw. When future repairs are made to the modified cash boxes, a repairman is able to remove the screw through the open cash box door, rather than remove and replace the rivets that are attached to the top of the container.

RESULTS:

Reduces repair time for an annual net saving of $17,917, and allows time to be spent on other repairs.

PROJECT: Computerized Maintenance Program

IMPLEMENTATION:

Members of the Service Improvement project group for the cash handling equipment repair area have utilized existing ticket-vending machine program data to improve monitoring repairs, warranty control and administering a preventative maintenance program.

RESULTS:

Repairs and preventive maintenance are performed on a more timely basis, and defect trends are detected and acted upon promptly, creating greater customer acceptance and satisfaction.

PROJECT: LRT Ticket-Vending Machine Revenue Collection

IMPLEMENTATION:

Members of the Service Improvement project group for the cash processing area analyzed previous collection revenue data and determined that some ticket-vending machines did not need collection every day of the week.

RESULTS:

Reduces collection time to allow other work to be completed without increasing staff.

ADDITIONAL PROJECTS:

PROJECT: Installation of Lock Housing (cash boxes)

Applying adhesive to the aligning washer when replacing lock housings in the cash boxes eliminates the need to dismantle the entire cash box.

PROJECT: Service Truck Equipment Storage.

Installed shelving and cabinets in the cash handling equipment service vans for greater safety, less damage to equipment, and increased efficiency.

PROJECT: Combination Work/Welding Bench

Designed a work station to allow for repairs and welding to be done without moving equipment, resulting in improved timeliness, safety and productivity.

PROTECTIVE SERVICES DIVISION

The Protective Services Division provides diversified services and expertise with respect to occupational health and safety, the security and safety of the public, and protection of The City's assets. The division also enforces the Calgary Transit By-law and other provincial statutes, including spot checks of LRT passengers to ensure they have paid the fare.

PROJECT: Improved Fine Collection from LRT Ticket Violations

IMPLEMENTATION:

As a result of the high incidence of unpaid summonses and the subsequent issue of warrants, the Enforcement Section initiated a "Warrant Letter."

This letter is mailed to individuals who have failed to either pay the specified penalty or attend court, and advises that this has resulted in the court issuing a warrant for their arrest. The letter also specifies that details of the warrant have been provided to the various police services and provides instructions for voluntary payment of the penalty.

RESULTS:

Use of the letter has resulted in fines collected exceeding the budgeted amount by $112,443 for 1988. It has also substantially decreased the number of warrants requiring execution by the Calgary Police Service.

TRAFFIC OPERATIONS DIVISION

The division is responsible for installation, maintenance, and operation of all traffic and LRT signals; manufacturing, installing, and maintaining of all traffic control signs; installing painted and plastic roadmarking; responding to public concerns on parking, movement of traffic and shortcutting; researching and evaluating new traffic control methods or devices; and maintaining the Calgary Traffic By-law, Truck Routes By-law and Transportation of Dangerous Goods By-law.

PROJECT: Develop Modems for Traffic Signal Controllers

IMPLEMENTATION:

The Traffic Operations Division used to purchase modems to install in traffic signal controllers. These modems allow the signal controllers at intersections to communicate with the Central Traffic Computer located in the Municipal Building. Two Signals Shop employees have designed a modem which can be manufactured by the Signals Shop, replacing the type we have been buying.

RESULTS:

The new modem will cost $145 per unit to manufacture compared to $1,163 per unit for the purchased one. With the fifty modems that will be installed in 1989, the net savings will be $50,878.

PROJECT: Different Cable for Loop Detectors

IMPLEMENTATION:

A Traffic Operations Division employee researched and located a better cable for use in traffic loop detectors. The new cable was developed specifically for this purpose, is simpler to install, and is significantly less expensive than the product used previously.

RESULTS:

The new cable costs 88 cents per metre compared to $2.88 per metre for the cable previously used. In addition, the new cable does not require the $20 splice kit that used to be required for each installation. The total savings for 1988 was $14,858.

PROJECT: Better Method of Installing Traffic Islands

IMPLEMENTATION:

A Traffic Sign Shop employee designed a better method to install traffic islands through improvements to the anchoring mechanism, the sign post mounting collar, and the lifting hook-ups for lifting and lowering the islands.

RESULTS:

The new method has resulted in a safer means of installing the traffic islands while reducing the crew requirement from three crews (boom truck, welder and jack hammer) to one crew (boom truck). This has resulted in a cost saving of $3,444 for the year.

TRANSPORTATION PLANNING DIVISION

The Transportation Planning Division provides information, develops plans, and makes policy and action recommendations to serve the public interest in ensuring the ongoing development of a safe, effective, and efficient transportation system.

PROJECT: Desktop Publishing

IMPLEMENTATION:

In conjunction with Data Processing Services Department, Transportation Planning's Drafting and Graphics group participated in a pilot project in 1987 designed to evaluate desktop publishing. The criteria for the evaluation were acceptable quality and reduction in production time.

RESULTS:

The desktop publishing work station evaluation clearly showed significant savings in time combined with a quality product. Based on the evaluation, a desktop publishing work station was established in 1988 in the Drafting and Graphics group. The quantity, quality, and variety of applications continue to increase.

The desktop publishing work station improved efficiency in the production of reports, information centre display material, and newsletters by approximately 25 percent. Presentation graphics, such as signs, charts, vu-graphs, forms, surveys, and questionnaires, are produced with an even greater saving - between 50 and 75 percent.

It was found that alternative layouts in the creative phase of a project can be visualized immediately, adding a new dimension to the graphic process, and resulting in a more challenging and interesting job.

PROJECT: Traffic Data Retrieval System

IMPLEMENTATION:

In late 1986, a project team, consisting of the Data Collection group in Transportation Planning and Data Processing Services, was established to review alternatives and to develop a computerized system to store, retrieve, manipulate, and analyze traffic data. Historically, all traffic data had been collected, analyzed, stored, and retrieved manually, resulting in increasing problems of storage, retrieval, and accuracy.

RESULTS:

A system developed during 1987 and 1988 is currently utilized to provide improved accuracy and efficiency of data retrieval and analysis. Data Processing Services Department developed all programs within the specifications prepared by the project team. Manual intersection traffic counts and daily machine counts are now being entered into the data base for computer analysis and storage.